LAND STEWARDSHIP OPTIONS

Prepared by
Ron Reid
Bobolink Enterprises

and

Stewart Hilts
Department of Land Resource Science
University of Guelph

1990

GREATER TORONTO AREA GREENLANDS STRATEGY

92-00771/

Additional copies of this and other Ontario Government publications are available from:

The Ontario Government Bookstore, 880 Bay St., Toronto for personal shopping. Out-of-town customers write to Publications Services Section, 5th Floor, 880 Bay St., Toronto, M7A 1N8. Telephone (416) 326-5300. Toll-free long distance 1-800-668-9938.

© Queen's Printer for Ontario, 1990

ISBN 0-7729-7391-1

LAND STEWARDSHIP OPTIONS

A Background Paper
Prepared for
The Greater Toronto Area Greenlands Strategy

by

Ron Reid
Bobolink Enterprises

and

Stewart Hilts
Department of Land Resource Sciences
University of Guelph
1990

RECYCLED PAPER

TABLE OF CONTENTS:

1.0 INTRODUCTION ...1

2.0 THE RATIONALE FOR STEWARDSHIP ...3

3.0 LAND STEWARDSHIP OPTIONS

3.1 Information and Education ...7

3.2 Verbal Agreements ..11

3.3 Written Agreements ..16

3.4 Management Agreements ..19

3.5 Leases ..24

3.6 Conservation Easements ..27

3.7 Purchase/Saleback ..35

3.8 Creative Development ..40

3.9 Conservation Real Estate ..46

3.10 Land Trusts ..49

3.11 Designation ..59

3.12 Dedication ..61

4.0 DELIVERING A STEWARDSHIP PROGRAM

4.1 Integration and Implementation ..63

4.2 Delivery Agencies for Stewardship ..66

4.3 Relationship to Acquisition ..67

4.4 Relationship to Land Use Planning ..68

5.0 PRIORITY RECOMMENDATIONS FOR STEWARDSHIP AS PART OF A GREENLANDS STRATEGY ..70

References ..72

APPENDICES:

Appendix 1: Example of Landowner Information Sheet

Appendix 2: Examples of Stewardship Brochure and Booklet

Appendix 3: Example of a Landowner Newsletter

Appendix 4: The Conservation Lands Tax Reduction Program

Appendix 5: Woodlands Improvement Act Agreement

Appendix 6: Fisheries Management Agreement

Appendix 7: Ducks Unlimited Landowner Agreement

Appendix 8: Bruce Trail Association Landowner Agreement

Appendix 9: OHF Natural Heritage Easement

Appendix 10: Funding for State Conservation Programs

1.0 INTRODUCTION

This study forms a part of the background for the development of options for a Greater Toronto Greenlands Strategy, a task assigned to Mr. Ron Kanter, M.P.P., by the Premier of Ontario on October 17, 1989. Mr. Kanter is to make recommendations in three key areas:

i) Identification of a regional greenspace system;

ii) Development of various control mechanisms to protect greenlands and measures to enhance them;

iii) Institutional arrangements to most effectively assist in the implementation of the Strategy.

In the context of the study, the term "greenlands" is intended to include:

* significant natural, cultural, and archaeological sites;

* lands that perform significant ecological functions, such as groundwater recharge/discharge or wildlife corridors;

* open space/recreational lands, including trails;

* rural lands, including agricultural and other rural lands.

This study on land stewardship addresses one of three major mechanisms to secure or control greenlands, the others being land use planning and regulatory controls, and public land acquisition.

Land stewardship is a relatively broad concept, and an evolving one. As this report will describe, a variety of specific techniques are being used across Ontario, North America, and other parts of the world which fall under the general umbrella of stewardship. However, all stewardship techniques do share several common elements:

i) They relate primarily to private lands;

ii) They rely on cooperative, voluntary participation rather than regulatory powers;

iii) They often involve partnerships of public and private funding and agencies.

Stewardship programs involving landowner contact and Natural Heritage Stewardship Awards for landowners making a verbal agreement to participate have been carried out in several parts of Ontario. A successful program in Carolinian Canada has been underway for several years; a pilot project has been completed along parts of the Niagara Escarpment; and more extensive programs are being developed for wetlands and in the District Municipality of Muskoka.

This study relates that experience, and experience from other jurisdictions, to the specific conditions existing within the Greater Toronto Area (GTA). In particular, the following characteristics of the GTA have been taken into account:

* The variety of landforms and associated ecosystems, including parts of the Niagara Escarpment, the Oak Ridges Moraine, the till plains and valleylands leading to Lake Ontario, and the drumlin fields and major wetlands north of the Moraine;

* The concentration of people and economic growth in the area, with 40% of Ontario's population on 1% of its land base, and the associated effects on land values and development pressures;

* The patterns of land uses in various parts of the area, ranging from dense urban development, rapid suburban growth on the urban fringe, estate development in the Oak Ridges Moraine and Escarpment areas, and traditional farming practices, especially in the more northerly parts of the GTA.

2.0 THE RATIONALE FOR STEWARDSHIP

Developing a new family of "land stewardship options" to conserve greenspace in the Greater Toronto Area can be based on four foundations. Taken together these provide a strong and urgent rationale for innovative new arrangements for greenspace conservation.

The first, and most obvious, foundation is the immense development pressure in the region, with its relentless influence on land prices. Future growth in population, housing, infrastructure and other land uses in the GTA will leave little open space except where public and private agencies specifically intervene. Projected growth rates will place incredible pressure on the quality of life in the GTA.

This pressure for development of the open rural landscape surrounding Toronto demands experimentation with every possible tool to maintain the quality of life in the region. Tools that build on the role of local municipalities and other agencies, that respect and build on the goodwill of private landowners, and that enable constructive interaction with the development industry will be especially welcome in the years to come.

Secondly, land stewardship options are important because the other major tools used to conserve open space today, direct acquisition and land use planning, face severe limitations. The purchase of land and its management by public agencies will always be a key part of greenspace conservation. Especially where public access is desired, as in a Conservation Area, public purchase of land is probably the best alternative. However, in a time of public deficits and ongoing restraint, it is simply not possible to see this as the only, or even the primary, approach to protecting open space.

Soaring land values, the long-term cost of owning and managing the land, and the fact that key parcels may not be for sale, all limit the effectiveness of this tool. This is not to say we should not be more ambitious in using this approach. Several U.S. States, smaller than Ontario, are much more actively involved with acquisition of greenspace, with budgets in some cases reaching into hundreds of millions of dollars; however, we must parallel acquisition efforts with many other approaches.

Similarly, there are limitations inherent in Ontario's land use planning process as a tool for securing greenspace. Put simply, this planning process was designed to achieve orderly and coordinated development. While it is widely used to conserve some greenspace, in many cases, such attempts end in conflict and failure, at enormous expense of time and money.

With land values at enormous heights in the GTA, the land use planning process is under tremendous development pressure. The intangible values of greenspace, while central to the quality of life for many Ontario citizens, simply do not hold enough weight to compete in an economic land market. In exactly the same way, housing prices are market driven, and the provision of affordable housing requires some type of market intervention for the public good.

Thirdly, it is critical to realize that our view of greenlands has shifted from a simple "first generation view" of open space as public recreational parks, to a "second generation view" of open space consisting of recreational areas plus natural ecosystems, hydrological systems, wildlife and rare species habitat, visually important rural landscapes, forests, wetlands, and more. For these other types of greenlands - what might be called the "ecological greenspaces" - public ownership is not necessary for the functions to be effectively sustained. Private land stewardship with appropriate control can quite usefully deal with these lands, often at less expense than public management.

Finally, land stewardship options are important to consider because they have worked so effectively elsewhere. In both Britain and the United States, there are hundreds of local land trusts that have protected millions of acres of natural and historic landscapes through a variety of innovative tools such as landowner agreements, conservation easements, purchase and saleback, and so on. Government agencies have often been key partners in these programs, or used the same innovative tools themselves to promote conservation, with widespread success.

The acres involved in these programs speak for themselves, but beyond the acres, the programs seem to inspire very positive reactions among agencies and landowners alike. The success stories read like "win-win" situations where all players in the game benefit.

Ontario has put significant effort into conservation programs in the past. Today we are witnessing a groundswell of public opinion and interest that says it is time to greatly expand these efforts, and develop a new range of positive conservation tools to enhance private land stewardship of greenlands.

Landowners contacted through the Natural Heritage Stewardship Program have been widely receptive to the direct landowner contact process used, and its emphasis on private land stewardship. This conservation program, sponsored by the Natural Heritage League, has involved contact with over 1200 landowners in southwestern Ontario over the past five years. Nearly 600 voluntary stewardship agreements have been negotiated covering over 16,000 acres of natural areas.

This report considers land stewardship options not merely as separate techniques, but as components of a process of negotiating conservation of private greenspace. Land stewardship options provide a positive starting point for working with landowners in a mutually beneficial process toward conservation. Techniques which may not be strong enough in themselves to protect greenspace in the Greater Toronto Area may still be valuable as components of an overall stewardship process.

The twelve stewardship options examined in the next section are presented in order of increasing strength and complexity. As well as providing examples of the use of each technique and an analysis of its general advantages and disadvantages, its specific potential within the GTA is examined. No one technique can be applied in every situation; in fact, a particular landowner might progress through a series of stewardship techniques over the years. In a sense, the more informal options at the weaker end of the scale can be considered entry points, to begin the process of building a positive conservation commitment by the landowner. The results of that commitment may secure the natural values of the property over many years, and may even result in a donation or an easement when the property must be passed to other hands. Within that general heirarchy then, almost all of the stewardship options described can play a role.

3.0 LAND STEWARDSHIP OPTIONS

3.1 INFORMATION AND EDUCATION

The provision of information and education in many different forms is central to any approach to private land stewardship. As a technique itself it has many advantages, especially in building a rapport with landowners and citizens. As a starting point for further stewardship efforts it is essential, the first basic step in working with landowners on a conservation strategy.

3.1.1 Examples of Information and Education

The simplest example of information provided to a landowner is an information sheet on a particular ecological site of which the owner owns a part, presented in order to inform landowners of the significance of their property. Such a sheet, summarizing the biological features of an area, is of great interest to landowners, and provides a simple starting point for discussion for the importance of stewardship options. An example is provided in Appendix 1.

A pamphlet can provide explanation and details of the stewardship options which might be negotiated with a landowner. An example is the simple pamphlet used by Ontario's Natural Heritage Stewardship Program, which details the conditions involved in the Natural Heritage Stewardship Award. This is modelled directly after many similar U.S. state program pamphlets.

A more substantial booklet can outline in greater depth the importance of natural heritage or greenspace, as well as various options for the landowner. Several U.S. state programs have produced booklets entitled *The Landowner's Options*. In Ontario's case, the booklet *Protecting Ontario's Natural Heritage Through Private Stewardship* provides a ready example. Examples of a brochure and a booklet are found in Appendix 2.

Many programs use newsletters of various styles to keep in touch with landowners, to remind them of their commitment, or to encourage them to make a commitment. This is used especially once a program has landowners signed up for stewardship. An example of a landowner newsletter is found in Appendix 3.

As negotiations proceed with landowners, different forms of information may become appropriate, either simply to cement the interest of the owner, or to provide specific details for further discussion. Programs in various parts of North America have provided landowners with air photos, guided tours of their property with a botanist, packages of management suggestions for wildlife or forestry, and management plans specifically tailored to a landowner's property.

Some jurisdictions have published general manuals for property management, such as *Wildlife Management on Your Land*, a U.S. text, or *Countryside Conservation - A Guide for Farmers*, a Scottish Countryside Commission report.

As agencies move beyond private stewardship agreements and landowner management plans into more complex options such as easements and donations, information that outlines examples for consideration is vital. An excellent example emphasizing environmental planning and design is provided in a booklet entitled *The Use and Protection of Privately Held Natural Lands*, published by The Natural Lands Trust based in Philadelphia. Another U.S. example, one that dwells at some length on tax implications, is a New Hampshire booklet entitled *Land Protection and the Tax Advantages for New Hampshire Landowners*.

3.1.2 Strengths and Weaknesses of Information and Education

Information and education approaches to conservation are not going to provide strong protection by themselves. However, they are critically important, for they provide the starting point for any land stewardship program.

In fact, in some cases, simply the provision of information does seem to have a major impact on individual landowners. Landowners may never have considered the ecological significance of their land before. A 1984 survey, for example, found that 40% of southern Ontario landowners were unable to give any reason for the importance of wetlands. (Pietraszko, 1984)

Learning about the significance of their property may well become a major influence on future decisions. Many private stewardship programs have discovered landowners who are already committed conservationists. The knowledge that their property is considered biologically significant is often a turning point in negotiations to establish a conservation strategy. The Natural Heritage Stewardship Program, for example, has demonstrated that approximately 20% of landowners probably need no further incentive than education to retain their natural areas intact.

Landowners in Ontario appear to have a strong interest in learning more about their own land and ecological management options for it. Landowners contacted in Ontario's Natural Heritage Stewardship Program have often expressed interest in learning more about managing their land for conservation, and have suggested that agencies hold public workshops on this topic for landowners.

Information provided to landowners may produce negative effects if it is perceived as leading to a regulatory, government imposed conservation program. For example, in a few cases in Ontario, the compilation of information in Environmentally Sensitive Area documents has led to strong public opposition and conflict. When information is the starting point for land use planning, establishing such an information base must involve a public process if landowner support is to be expected.

3.1.3 Applicability to the Greater Toronto Area

The provision of information and education programs should clearly be a part of any strategy to protect greenspace in the GTA. On the positive side it should be looked upon as a vital starting point, and an important way to build public support for conservation programs. In the context of a stewardship program, provision of information in many different forms can be part of a long term process of building landowner commitment.

On the other hand, the simple provision of information or the offering of public education programs should not be seen as an answer in itself. Land values in the GTA are too high to expect conservation to come about without further encouragement in a variety of ways.

Because GTA landowners vary significantly in their background, education, and attitudes, information should be provided in as many innovative ways as possible. Landowner workshops, newsletters, education programs tailored to specific ratepayer groups or ethnic groups could all play a role in building a strategy for greenlands conservation in the GTA. While most past information programs have highlighted significant natural areas, this technique could be directed at all types of greenspace in the GTA.

3.1.4 Incentives for Information and Education

Financial support for agencies wishing to develop and deliver information packages or educational programs is necessary. For landowners, the information itself is the incentive. Training programs for agency staff in innovative communication techniques could also be a useful incentive for further involvement in some instances. With appropriate financial assistance, non-government interest groups could also play a vital role in educating landowners about the significance and appropriate management of greenlands, in a parallel way to the role played by Soil and Crop Improvement Associations in the agricultural community.

3.2 VERBAL STEWARDSHIP AGREEMENTS

Verbal stewardship agreements are `handshake' or verbal agreements between a landowner and a conservation agency, wherein the landowner makes a commitment to conserve the natural heritage features of his or her property. Such agreements can be applied in many situations; many North American jurisdictions have used a standardized verbal agreement as the initial conservation approach to private landowners.

3.2.1 Examples of Verbal Stewardship Agreements

Over the past decade many U.S. states, with leadership from the U.S. Nature Conservancy, have developed verbal stewardship agreement programs. These are commonly referred to as landowner contact or registry programs. In Ontario the Natural Heritage Stewardship Award was modelled directly after these U.S. examples. Developed in 1985, it was first negotiated with landowners in southwestern Ontario in 1987.

The general approach used has been outlined clearly by Hoose (1981; 1984). After sites of ecological or heritage significance have been identified, landowners are contacted by letter and phone, and then with a personal visit. During the visit the importance of the site is explained to the landowner, and an attempt is made to negotiate a verbal promise of protection.

In the Ontario program, landowners are asked:

> To maintain and protect the natural area to the best of their ability; and
>
> To notify the Natural Heritage League or a designated program representative of any:
> - planned land use change that might threaten the natural heritage features,
> - other threats to the area, such as intensive lumbering or drainage,
> - intent to sell or transfer ownership of the property.

This promise is explicitly outlined in the pamphlet describing the program (see Appendix 2), and clearly explained to the landowner during the visit. The same basic wording of a commitment to conservation has been used in many of the U.S. state-level programs, with great success.

In return for making this verbal commitment, landowners receive a plaque or certificate of some sort. In Ontario, this consists of a hardwood plaque with a mounted bronze medallion, and a nameplate signed by the provincial Premier and the Chairman of the Natural Heritage League. These are presented at ceremonies with at least some honorary fanfare and publicity.

In terms of the numbers of landowners involved, such verbal programs have been very successful. As of 1984, Hoose reports that owners of over 1200 properties across the U.S. had been contacted under The Nature Conservancy programs, with more than 80% of landowners agreeing to participate, and no more than 10 of these agreements later being broken (Hoose, 1984).

A similar positive response has been achieved in Ontario, although the primarily agricultural nature of the lands involved in the Ontario program resulted in somewhat lower participation. Among over 1200 landowners contacted, approximately half have committed themselves to the terms of the stewardship agreement, and a further 30% have been categorized as "conservation-minded". These verbal stewardship agreements cover over 16,000 acres of ecologically significant land in southern Ontario.

Landowner contact programs aimed at negotiating verbal stewardship agreements are not usually an end in themselves. Such an agreement is seen as a starting point for relations with the landowner, with various levels of follow-up brought to bear, depending on the particular circumstances of the owner. A few cases will evolve into more complex transactions. Others will remain stable, but this must be encouraged through further contact, newsletters, and other means. In Ontario, local agencies are encouraged to carry out annual follow-up contact by phone, and in person every 2 or 3 years. A newsletter is also mailed twice annually to all participating landowners (see Appendix 3).

3.2.2 Strengths and Weaknesses of Verbal Stewardship Agreements

There are obvious weaknesses to a verbal stewardship agreement, especially in an urbanizing region of high land values. Verbal agreements have no legal status, and do not enforce any commitment to conservation. They do not allow for the specification of any detailed management objectives, and rely a great deal on trust and understanding. Some would say that they represent no protection at all.

On the other hand, verbal agreements have some very positive advantages. They can be negotiated quickly and simply, often in one visit, and with minimal paper work. In terms of simple efficiency, and the number of landowners who can be visited, verbal agreements are easy to work with. They are also seen very positively by landowners. U.S. Nature Conservancy staff estimate that the numbers of cooperating landowners would be cut in half if written agreements were always used.

In addition, verbal stewardship agreements are a positive, non-threatening starting point for the gradual negotiation of stronger protection. They provide an easy but sincere mechanism for sorting out landowners according to their intentions, and thus for focussing scarce financial and staff resources on more critical cases where property is threatened. Over the long run, they may well lead to greater landowner commitments, including donations of land.

Verbal agreements have a significant educational value, and may be useful as a starting point (perhaps in modified form) for land use planning approaches to greenland conservation. Based on the experience of Ontario's Natural Heritage Stewardship Program to date, attempts to protect sites through zoning are more successful after a verbal landowner contact program has been undertaken.

The negotiation of verbal agreements even appears to present a non-threatening opportunity to discuss intentions with negative landowners. While there are clearly some landowners who will be unwilling to make a voluntary commitment to conservation, most of these seem to appreciate the direct landowner contact approach, and agree that voluntary verbal agreements are a good tool to use. Thus a program can be built without initially alienating an important group of landowners.

3.2.3 Applicability to the Greater Toronto Area

In the long run, verbal land stewardship agreements in their own right are not likely to be a strong conservation tool in the GTA. Their value lies in their role as a starting point, as a device for building positive initial support among landowners, and for sorting landowners according to their intentions. In a widespread program, verbal agreements could have an important role in shepherding landowners over the short run, keeping them part of the bigger picture while other priorities are pursued first.

While their legal protective strength is low, their efficiency and their educational value should not be overlooked. The catalytic role of landowners honored under such a program as local leaders for conservation may be invaluable. Future donations by even one or two landowners could pay for a program many times over. The negotiation process itself is a positive attribute of this technique which could set the tone for an entire program. As an editorial in the *Natural Areas Journal* stated:

> "Landowner contact is the heart of marketing land conservation. Unless preservation programs can persuade the owners of critical parcels to take the actions necessary for preservation, all the other aspects will be for nought." (Emory, 1984)

This landowner contact process is important for all types of greenspace in the GTA, particularly where the intent is maintenance of natural functions. However, verbal stewardship agreements will not be appropriate for sites where public access for recreation is desired.

3.2.4 Incentives for Verbal Stewardship Agreements

Few incentives are needed for voluntary verbal or `handshake' stewardship agreements. Information provided to landowners serves as one important incentive, as can a plaque or certificate given out in recognition. For some owners, a sense of civic pride or doing something for the local community is also an important incentive. In fact some owners are willing to make such an agreement without any formal recognition such as a plaque.

Direct financial incentives for landowners are not appropriate at this level. However, there are financial costs involved in running a landowner contact program for the agencies involved, and provision of a secure funding basis to carry out the programs is certainly necessary. Because verbal stewardship involves much more than a single visit, funding programs should be based on long-term commitment.

3.3 WRITTEN STEWARDSHIP AGREEMENTS

Written stewardship agreements are simple agreements for conservation signed by landowners. Because they are merely written, and not formal legal documents like an easement, they usually only last for a period of years. Their contents are similar to verbal agreements, but can involve somewhat more detail in terms and conditions. In this section, stewardship agreements are considered separately from management agreements, which cover situations where active management to protect ecological values or to handle public use is required. Written stewardship agreements involve only a general promise of protection for the heritage features involved.

3.3.1 Examples of Written Stewardship Agreements

There are few examples of this technique actually in place, because in most cases when agencies go to the trouble of obtaining a written signed agreement, they work toward a more binding easement or a more detailed management agreement to meet particular objectives.

In some U.S. states, the verbal stewardship agreements described in the foregoing have been translated into written agreements. Otherwise they are identical to the verbal agreements. The Ministry of Natural Resources in Ontario, in its *Implementation Policy for Areas of Natural and Scientific Interest*, has proposed using 'Letters of Understanding' signed by a landowner, to cement a conservation agreement. However, to date no such letters have been signed.

The best example of a written stewardship agreement in Ontario is the Conservation Lands Tax Rebate Program. Under this program, landowners of certain significant natural areas are eligible for a 100% property tax rebate on the natural area portion of their land, provided they sign an affidavit promising to leave the area in a natural state. The agreement is therefore in writing, but specifies no details beyond this basic promise (See Appendix 4).

3.3.2 Strengths and Weaknesses of Written Stewardship Agreements

On the positive side, written stewardship agreements appear to carry more weight with landowners than verbal agreements, but are less legally complex than many other forms of agreement. They do represent a serious commitment on the part of a landowner. With the structure of Ontario's Conservation Lands Tax Rebate Program, there is also a cumulative financial penalty for breaching the agreement. Any owner wishing to back out of the agreement must repay the rebate received over the previous ten years plus interest. Over time, this could amount to a strong incentive to maintain such agreements.

Such general written agreements are also fairly simple in nature compared to management agreements or easements. They hold the promise of handling large numbers of landowners relatively quickly, efficiently, and cheaply. Properly structured, they could incorporate an educational component, using brochures or site visits to reinforce positive landowner attitudes, although the present tax rebate program in Ontario is not designed to accomplish this.

While written agreement programs do generally depend on a financial incentive, the amount of public funds involved is not large, especially when compared to the parallel agricultural land tax rebate in the province. Other written management agreements, such as those contemplated under the ANSI program, could use additional non-financial incentives to meet their objectives, such as landowner recognition.

On the negative side, written agreements are going to appeal to fewer owners than verbal agreements. In the existing tax rebate program, the educational value of the landowner contact in a personal visit is missing since the application process is by mail. As well, Ontario's tax rebate is only available at present for a limited number of natural heritage properties.

The penalties built into the Conservation Lands Tax Rebate program may not be effective if they are not consistently applied. A major concern for any tax rebate program is the extent to which penalties are actually applied, since failure to do so can negate much of the value of the technique, especially in an urbanizing area.

3.3.3 Applicability to the Greater Toronto Area

Written stewardship agreements could have substantial value in a greenspace strategy for the GTA. Letters of Understanding could be a positive and relatively simple tool for building landowner commitment on key sites. The Conservation Lands Tax Rebate, if extended to regionally significant greenspace beyond wetlands, could be a powerful tool for achieving landowner commitment; however, the program would have to be structured carefully to achieve education objectives and to achieve long term conservation, given the high land values involved.

It is expected that this technique would be particularly useful for greenspace types which do not require public access.

3.3.4 Incentives for Written Stewardship Agreements

At present, a tax rebate, often no more than a few hundred dollars, is the incentive for landowners to sign up under the Conservation Lands Tax Rebate Program. The size of the financial incentive does not appear to be too important, but some basic level of direct financial incentive is necessary. Other forms of written agreements could conceivably function without financial incentive, but rather be based on civic pride, and recognition gifts such as stewardship plaques, as is the case with verbal stewardship agreements.

3.4 MANAGEMENT AGREEMENTS

A wide variety of management agreements are used in Ontario and elsewhere to achieve conservation objectives. Such agreements normally have a fixed term, and can range from informal agreements with no legal force to binding legal contracts. In most agreements, a public agency provides technical and financial assistance, while the landowner provides the land base for management, and agrees to follow specific management practices.

3.4.1 Examples of Management Agreements

The most common types of management agreements now in use in the GTA relate to forestry, particularly agreements with private landowners under the Woodlands Improvement Act (WIA). Together with related forestry agreements for municipal and conservation authority lands, approximately 7% of the GTA's forest cover, some 11,000 hectares, is managed by Ministry of Natural Resources (MNR) under these agreements.

Within the terms of a 15-year WIA agreement, MNR provides labour and trees to replant marginal lands, to improve stand quality through thinning or other silvicultural techniques, and to mark stands for commercial cutting. Owners agree to protect the forest, and to permit MNR employees access to carry out inspections and forestry operations. If the owner's responsibilities are not fulfilled, or if the property is sold and the new owner is unwilling to assume the agreement, the estimated management costs must be repaid. While the WIA program allows management to meet a number of objectives, including site protection, aesthetic values, wildlife habitat, and recreation, in most cases the management orientation is towards future commercial wood production.

A sample of the Woodlands Improvement Act agreement is included in Appendix 5.

The Ministry of Natural Resources may also enter into landowner agreements to improve fisheries habitat along streams and rivers under the Game and Fish Act (See Appendix 6). These agreements typically involve fencing for livestock, erosion control and streambank plantings, with MNR undertaking the work directly or providing materials to landowners. The owner agrees to provide access for MNR employees and not to alter or destroy the improvements.

Under the Community Wildlife Improvement Program and the Community Fisheries Involvement Program, MNR can also provide financial and technical assistance to groups or individuals to carry out management activities. However, these projects do not normally involve a long-term management agreement.

Many conservation authorities also enter into management agreements with private owners under the Conservation Authorities Act. In these cases, the term of agreement may be for 15 years or more, and the Authority and the landowner often share the management costs involved.

The most notable example of management agreements by non-government groups is the work of Ducks Unlimited. This organization enters into agreements with landowners for the improvement of waterfowl breeding habitat though water control structures or other habitat management techniques. Their agreements are normally for 21 years, although they may run longer (see Appendix 7), and owners receive only a token fee and improved habitat as compensation. Although Ducks Unlimited in Ontario does not normally register their agreements on land titles, the wording of the agreement allows them to do so. Normally new owners of property under agreement are contacted to assume the agreement, and most do so.

Management agreements to provide public access have seen more limited use. The Bruce Trail Association usually bases its relationships with trail landowners on an informal handshake, but if the landowner wants, will sign a formal written agreement (Appendix 8). Most landowners, however, prefer not to tie themselves into such an agreement. The Association only has three written agreements with private landowners at present. Trail agreements with government agencies who own land along the Bruce Trail are also sometimes used.

Management agreements have seen extensive use in other jurisdictions as well, both at a government and non-government level. The Countryside Commission in Britain, for example, makes use of management agreements and grants to private landowners to encourage tree planting and forest management. The Natural Lands Trust, based in Philadelphia, works through agreements with private owners to provide management advice for wildlife or recreational uses, or to develop strategies for the conservation of significant features during land disposal or development.

3.4.2 Strengths and Weaknesses of Management Agreements

Perhaps the greatest strength of the management agreement approach is its ability to encourage appropriate management practices in a form that is acceptable to a substantial number of landowners. Judging from the experience of such programs as the Woodlands Improvement Act and Ducks Unlimited, it seems clear that many landowners are willing to make long-term commitments in return for technical advice and limited financial investments in their land.

Viewed in a broader context, management agreements are an excellent vehicle to attain greater landowner awareness and involvement in the natural features on their lands. Even simple management activities like building bird boxes helps build greater appreciation and commitment to natural values. This appreciation may be reflected in years ahead by landowner willingness to try other stronger stewardship options to protect greenspace.

From the perspective of the agencies involved, the advantage of management agreements is the provision of an extensive land base for their programs at relatively low cost. While the initial staff and capital costs may be considerable, the ongoing maintenance and carrying costs for the lands managed is very low compared to the expense of acquiring lands to provide the same benefits.

On the negative side, a major drawback to management agreements is their limited duration, and the relatively low penalties for landowners who break the terms of the agreement. While WIA agreements require owners to repay the direct management costs incurred, this penalty is unlikely to have much influence over a landowner who is considering development options within his woodlot.

A second disadvantage of management agreements, as typically structured now, is their primary orientation towards resource production. Some landowners contacted during the pilot stewardship program on the Niagara Escarpment suggested that owners would be more interested in flexible agreements that could address protection of rare species, scenic quality, or other objectives. Certainly within the GTA, a considerable body of rural non-farm landowners would appear to value the recreational, ecological, and scenic attributes of their woodlots more than the prospects of future commercial gain through timber harvest. The current management agreement structures do not fit well with the objectives of these landowners.

Finally, the experience of the Bruce Trail Association suggests that management agreements are probably not a favoured means of securing public access, largely because of landowner resistance.

3.4.3 Applicability to the Greater Toronto Area

Management agreements are likely to play almost no role in the urbanizing fringe of the GTA, where lands are held in expectation of future development. In the more northerly parts of the GTA, however, where the pattern of land use and ownership is more stable, management agreements could play a significant role in protecting and enhancing natural habitats.

In large part, the success of this role depends upon agencies developing agreement structures more oriented to the needs of GTA rural landowners. While there will still be a demand for the tree-planting and commercial forest management services provided under WIA agreements, the popularity of that tool could be expected to decline in areas such as the Oak Ridges Moraine as the proportion of urban-oriented landowners rises. Alternative agreements which emphasize preservation of natural values, and enhancement of diversity and visible wildlife, could be expected to grow in popularity. In particular, landowners seem to be looking for more "integrated" types of management, which may combine some elements of forestry, wildlife management, passive recreation, and so on.

While management agreements could be employed within most types of greenlands, their lack of strength in preventing land use change would suggest that they are not the most appropriate tool for areas of provincial significance. In river valleys or wetlands where strong land use regulations offset development pressures, management agreements on private lands would provide a mechanism to reinforce or enhance natural values. In other areas, their use is likely to be limited mainly to owners who are sympathetic to the protection of natural landscapes in any case.

3.4.4 Incentives for Management Agreements

At present, the primary incentive for landowners to undertake management agreements is the access to technical advice and capital investment provided. There is also some "recognition" incentive for some management programs, such as the familiar green triangle sign identifying woodlots under WIA management. These incentives could be strengthened by:

i) Development of new or restructured management agreement programs for natural areas to more closely meet the objectives sought by near-urban landowners, perhaps through an integrated Natural Heritage Management Agreement;

ii) Improved promotion of agreement programs through ratepayer groups, clubs and societies, and landowner contact programs;

iii) Linkage of management agreement programs to property tax rebates, such as requiring a woodlot to be under a WIA or equivalent management agreement before qualifying for the Managed Forest Tax Rebate.

3.5 LEASES

Leases are simple standardized agreements wherein one party pays for the use of a property for a period of time, usually by the year in the case of rural property. This technique has quite limited use as a conservation tool in southern Ontario, but does have some advantages for specific situations.

3.5.1 Examples of Leases

The primary example of the use of leases for conservation comes from the Canadian prairies where three major pilot projects, all sponsored in part by Wildlife Habitat Canada, are using leases (or licenses, a closely related legal term) in order to protect prairie potholes for waterfowl habitat.

Manitoba's Habitat Enhancement Land Use Program (H.E.L.P.), Saskatchewan's Prairie Pothole Project, and Alberta's Habitat Retention Program all operate primarily on the basis of leasing land from farmers (Cox, 1985; Wildlife Habitat Canada, 1989). These projects all have major budgets for the actual payments to farmers which are required.

Leases have also been used in one or two cases of natural area protection in Ontario, for example local nature reserves leased by naturalists clubs. They are used occasionally in the United States, especially as temporary measures while negotiations toward a more permanent form of protection are carried out.

In southern Ontario one specific use that has been suggested is for dealing with the case of Indian Reserves, where normal purchase is not possible legally, but leases are. In fact, a Michigan conservation organization leased ecologically significant lands in the Walpole Island Reserve for several years.

Conservation leases have also been used in other relevant ways. One of the provisions of the Land Stewardship Program run by the Ontario Ministry of Agriculture and Food is for a stewardship lease. This is aimed at rural non-farm landowners renting land to farmers. By including appropriate conditions in their lease, landowners can ensure good soil and water conservation practices by the renting farmer.

Many land trusts also use leases as a management tool on lands that they own. Renting properties out helps pay ongoing costs, and a lease provides the legal mechanism for ensuring that all conditions relating to conservation of the land are met. Detailed leases enable a land trust to effectively manage its holding while realizing some financial return (Matthei, 1984).

3.5.2 Strengths and Weaknesses of Leases

The major weaknesses of leases as a land stewardship option are their cost, especially where land values are high, and their temporary nature. They do not normally provide permanent land protection. An indirect weakness of leases is that their use may set a precedent for future conservation arrangements, wherein landowners come to expect ongoing payments in return for their commitment to conservation.

The strength of this technique is that it is a simple legal document which is familiar to many people, especially rural landowners, but which can be detailed enough to specify many individual conditions. The high level of comfort farmers have with leases is a key reason for their widespread use in the prairie habitat projects.

Leases can also be negotiated quickly, and provide a convenient legal mechanism to buy time. On Indian Reserves they may be one of the only legal mechanisms to control land use.

It should be noted that leases could be held at nominal rates, or even donated in some situations, but in other situations, land values would make the cost of leasing land prohibitive.

3.5.3 Applicability to the Greater Toronto Area

Leases have limited but specific applicability to greenspace conservation in the GTA. They have value as a short term tool for securing land while negotiations take place. If limited development through land trusts, for example, is chosen as an important option, leases should be available for the land trust to use as a holding mechanism in the short run.

Leases could also be a management tool for land trusts and other conservation organizations to rent out their land holdings while specifying conditions of rental in some detail. It is conceivable that some landowners would consider donating a lease on land for conservation, retaining ownership while committing the land to conservation use.

It is not anticipated that leases will be a widespread conservation option in the GTA because of their cost and temporary nature. Where leases are used as interim measures, they would appear to be applicable to all types of greenspace.

3.5.4 Incentives for Leases

For a landowner to enter a lease would normally require some direct payment of funds. Landowners who might donate leases could be encouraged through a range of incentives including stewardship recognition gifts such as a plaque, or through a tax receipt for the value of the lease donated.

3.6 CONSERVATION EASEMENTS

Conservation easements can provide permanant, property-specific protection for natural features on private land through legal agreements to restrict the management and use of significant areas. While there has been considerable experience in the use of easements in the United States, they have only recently been tried in Ontario. The Ontario Heritage Foundation (OHF) is the primary agency involved in securing easements, because of enabling legislation under the Ontario Heritage Act. Other government Ministries have the legal ability to hold conservation easements under the Government Services Act, but have not done so to date. Conservation Authorities and non-government conservation groups can hold easements only under common law, which severely limits their usefulness.

3.6.1 Examples of Conservation Easements

Conservation easements have become an important land protection tool over the past two decades in the United States, with over 688,000 hectares now under easement. About one-quarter of those easements are donated, primarily to non-government groups. The U.S. Fish and Wildlife Service has actively purchased conservation easements to protect prairie wetlands, and now holds over 21,000 easements on 486,000 hectares of land. Conservation easements protect forest lands, wildlife habitat, scenic views, agricultural lands, and natural areas. Forty-four states have enacted legislation to overcome the difficulties associated with common-law doctrine.

In many of the American programs, conservation easements are used in conjunction with other land protection techniques. The Charles River in Massachusetts is a good example. This 128-kilometre waterway flows though a watershed that is more than half urban to empty into Boston harbour. The scenic and recreational value of the Charles has been recognized by several agencies, and approximately two-thirds of its banks are in public ownership. Conservation easements are used as an important tool in part of the remaining private lands.

The Trustees of Reservations, a long-established conservation organization, has negotiated 13 easements along the river, along with purchasing outright four other parcels. The Trustees note that conservation easements occupy a special protection niche, especially where the goal is protecting scenic integrity rather than providing public access. Because of the high property values along the Charles River, outright acquisition of all riverfront lands is difficult, and most people are not interested in outright donations.

Conservation easements were also used extensively in protection of wetlands and valleylands along the upper and middle reaches of the river, as part of a Natural Valley Storage program sponsored by the Army Corps of Engineers to prevent downstream flooding. This federal program purchased almost 2000 hectares of conservation easements, along with 1300 hectares of lands purchased outright. Project managers report substantial savings through the use of easements - a cost averaging $100 per acre compared to $300 to $20,000 per acre for purchased land. The easement program was also crucial to the high public support for the program because it gave landowners the choice of retaining title to their land. (Schwartz, 1985)

The limited experience with conservation easements in Ontario has brought mixed results. The Ontario Heritage Foundation has accepted heritage easements on historic buildings for some years in exchange for provincial grants. To date, however, the Foundation holds only five natural heritage easements across the province, and two easements on archaeological properties (See Appendix 9). Lack of public understanding of easements has been identified as an obstacle to more widespread use, along with the limited ability of other organizations to acquire easements. (Collins, 1989) An analysis of the use of conservation easements in Ontario also identified lack of clear criteria, unfamiliarity of agency staff and appraisers, questions about cost, unweildy easement documents, and lack of financial incentives as obstacles. (Reid, 1987)

One of the Ontario Heritage Foundation conservation easements was registered in 1989 as a condition of a subdivision approval in the Jordan Heights area in

Niagara Region. Because the easement is designed to provide a buffer between the subdivision and the face of the Niagara Escarpment, it affects twelve owners of individual lots. While most of the owners respect the easement, two have created enforcement problems. In similar situations in future, the OHF has decided that it will only accept such an easement if the block of land affected is held by a single owner, to simplify education and enforcement needs.

In their other natural heritage and archaeological easements, the OHF have not encountered enforcement problems. In circumstances where public access is undesirable for management, the private land status associated with easements can be an asset. For example, an OHF easement protects an archaeological site near Milton from disturbance; continued private ownership of the land helps curtail casual theft of artifacts by trespassers. Some easements protect visual access rather than physical access; a heritage easement protects the public view of the Briars, a historic resort on the south shore of Lake Simcoe.

3.6.2 Strengths and Weaknesses of Conservation Easements

The advantages of conservation easements have been well-documented from their use in the U.S. The main advantages include:

i) The costs of acquisition may be less, depending on the value of development potential or other uses removed by the easement. In a rural setting, the cost of purchased easements typically range from 20% to 50% of the cost of purchase in fee. In a near-urban setting, the cost will rise in relation to increased expectations of future development. Purchasing easements on serviced tableland suitable for subdivision would be virtually identical in cost to buying the land outright, for instance, while the cost of conservation easements in regulated floodplains might be considerably less. In Ontario, all conservation easements to date have been donated, or given in exchange for other considerations such as restoration grants, so estimating the range of purchase costs is difficult.

Another factor which affects the cost of easements is the degree of restrictions imposed. An easement which allows one house to be built on a parcel of land will cost less than one which permits no development at all; a conservation easement prohibiting tree-cutting will have a higher price tag if the property in question has a mature hardwood forest. Easements which provide public access over private land are likely to be particularly expensive, since many landowners are wary of long-term arrangements for such use.

The total cost of an easement must also reflect the administrative costs associated with negotiating and registering it on a property. As well as the legal work involved, an appraisal may be required, with costs similar to those involved in purchasing the property outright.

Despite these costs, experience in the Charles River near Boston and in many other parts of the U.S. proves that conservation easements can be significantly less costly to acquire than outright purchase in many circumstances. As well, at least some private owners who are unwilling or unable to donate property outright will consider donation of a conservation easement.

ii) Management costs of conservation easements are normally much less than the comparable cost of managing public lands. While easements must be monitored routinely (normally once per year) and any violations remedied, that workload is significantly lower than the ongoing monitoring of public undeveloped lands. The private owner of the land continues to pay the property taxes and carries out most maintenance activities, such as fencing, unless the easement specifies otherwise.

iii) The social disruption associated with public acquisition programs is minimized by the use of easements, particularly where owners have a choice of outright purchase or easements. Because owners remain on the land, the impact on established communities is minimal, and the land itself generally remains in some productive use.

iv) An easement agreement is extremely flexible, which can be tailored to meet the management needs for a particular property, and the particular circumstances of each landowner.

v) Conservation easements provide permanant protection for the features associated with the land, since they are perpetual in term and apply to all future owners. They thus are a much stronger protection instrument than land use regulations, which may change with the political climate or with changes in ownership.

On the other hand, the disadvantage associated with conservation easements are also well-known:

i) The unfamiliarity and apprehension of private landowners about encumbering their land with a legal, complicated agreement is a major constraint on the use of the technique. Many landowners are unwilling to enter into the kind of long-term partnership with a government agency that a conservation easement implies; others are understandably concerned about the impact on future property values, in the absence of Ontario experience to guide them. This landowner reluctance is illustrated by the recent experience of the Bruce Trail Association - in four years of promoting easements to landowners, they have found only one owner willing to pursue the concept.

ii) Often in the absence of any real experience with easements, there is a widespread perception among agency staff that conservation easements are complex to administer, costly to acquire and enforce, and ineffective in achieving public objectives. There is also a strong bureaucratic preference for the traditional route of outright acquisition of land, and hence outright control over its use. In the short term, the inexperience of negotiators and appraisers with the technique do present real difficulties in the development of conservation easement programs.

3.6.3 Applicability to the Greater Toronto Area

For the foreseeable future at least, conservation easements are likely to appeal only to a small group of landowners, and to play a relatively small role in the GTA. That role could and should be strengthened by deliberate strategies to increase the attractiveness of conservation easements to both agencies and landowners, as outlined in the incentives section below. Within the GTA, there are some settings where the use of easements should be particularly encouraged:

i) Conservation easements can be particularly useful in the protection of elements of special landscapes, especially if used in conjunction with land use regulations. Protecting the scenic and hydrological values of the Oak Ridges moraine is one good example, where development need not be completely prohibited, but rather limited and directed into the most appropriate locations and forms. Easements could be a useful tool in this setting because they could retain productive uses of the landscape, such as agriculture, forestry, or limited estate development, while providing the permanance of protection needed to counter the increasing pressures to urbanize over the coming decades.

In some cases, conservation easements might be donated by sympathetic landowners, particularly if blocks of owners acted together to jointly protect the scenic quality of their neighbourhood. In fact, in some U.S. settings, land trusts have negotiated easements with individual owners, and placed them in escrow as a condition of acceptance until all the owners within a specified area had enrolled in the program. In this way, rural owners can be assured that their investment in a quality environment will be protected, and the group of easements can act to everyone's benefit.

Landscape conservation easements could also be purchased. To overcome the difficulties associated with appraisal of easement values, a program of relatively standard easements could be offered in selected landscapes at a set value - say 30% of the full appraised property value.

ii) Conservation easements offer a method of securing long-term protection of valleylands, wetlands, and other regulated areas without the full expense of maintaining them as public lands. The values to be protected by easements would need to be carefully defined - where public access was desired, easements would be more difficult to obtain and administer. In some circumstances, easements over blocks of natural lands set aside during the negotiation of development agreements, perhaps with the lands jointly owned by subdivision residents, would be preferable to public ownership of isolated parcels of land.

iii) Conservation easements could be put to use in securing the conservation of some public or institutional lands, where future management was a particular concern. Protection of key natural features on certain municipal or utility lands, for example, might be the subject of conservation easements.

iv) While easements for public access are of limited potential in most cases, they might be very useful in routing a trail across the centre of a parcel of land where the creation of new lots by acquiring a strip outright was undesirable.

3.6.4 Incentives for Conservation Easements

At present, the only incentives for conservation easements in the natural heritage area are the altruistic motivation of landowners, and the possibility of a donation receipt for tax purposes. While the inexperience of Ontario's appraisal industry with easements makes the issuing of donation receipts more complex than usual, at least one receipt for an easement donation has been issued, and accepted by Revenue Canada. The income tax and capital gains tax advantages of donated easements need to be more fully explored and promoted.

Several other incentive packages are possible, short of the public purchase of conservation easements.

First, a pool of funds could be established to assist landowners in undertaking appropriate management activities in exchange for an easement. This approach would be parallel to that used by the Ontario Heritage Foundation for heritage easements on historic buildings. It would also draw upon extensive British experience, particularly by the Countryside Commission, in providing grants-in-aid to rural landowners as an incentive.

Second, easements could be linked to the Conservation

Lands Tax Rebate program, to provide immediate property tax relief for any owner signing an easement. As an alternative, a new property assessment category could be created to recognize greenlands where future development potential is permanently restricted.

Finally, a major incentive for greater use of conservation easements would arise from legislative amendments to permit non-government groups and conservation authorities to hold clearly-defined statutory easements. As well as providing greater flexibility and sense of local ownership in easement programs, this would remove a major hurdle for those owners who are reluctant to become involved with government agencies. Spreading the ability to negotiate easements would also act as an impetus for the development of much simpler, more understandable easement documents, which is essential to overcome landowner resistance.

3.7 PURCHASE/SALEBACK

As the name suggests, this technique involves the purchase of properties by a government agency or private conservation group, the protection of significant features through several possible means, and then the subsequent resale of the property. Because of the multiple transactions required, this technique is more suited to non-government organizations, who are less likely to become entangled in the layers of approvals required in government agencies. There are several variations on this theme, some of which already take place in Ontario.

3.7.1 Examples of Purchase/Saleback

One form of purchase/saleback which is relatively common is the purchase of an entire property, either because it is listed on the open market or because of landowner wishes, the severing of significant sections to be retained as public land, and the resale of the remainder. The Bruce Trail Association (BTA) has used this technique on several occasions in recent years with considerable success.

For example, using funds provided through the Niagara Escarpment Program of the Ontario Heritage Foundation, the BTA purchased a 169-acre farm in Collingwood Township for $85,000. After re-arranging the configuration of several existing severances, the Association sold one lot for $60,000, and is marketing the other for over $75,000. The remaining 100 acres, including the trail route, is retained for public use.

Another 150-acre parcel in Nottawasaga Township was purchased, a 15-acre strip severed to secure the route of the trail, and the remainder resold by public auction at a profit. In these cases, the revenues received go back into the Niagara Escarpment Trust Fund to finance future purchases.

In several other cases, the BTA has exchanged surplus lands with neighbouring landowners to secure additional sections of the trail. Because provincial funds are involved, each parcel of land must be appraised to ensure a fair exchange.

A variation on this sale of surplus lands is the concept of pre-acquisition, where a private agency uses its flexibility and ability to move quickly to purchase property for later resale to a public agency. This kind of partnership arrangement has been commonly used in the U.S., for example in land purchases by the Adirondack Land Trust for resale to Adirondack State Park. The Nature Conservancy of Canada has also taken part in these arrangements on occasion, and has a formal agreement with Parks Canada to act as an agent in acquiring land on its behalf.

In most cases in the U.S., the purchase/resale technique takes a different form, with the resold properties normally being restricted through conservation easements. In many cases, all of the property is resold; sometimes parts are retained in the hands of a land trust or government agency.

One such example comes from the Dutchess Land Conservancy, a private organization located midway between New York City and Albany, in an area under considerable development pressure. Their first purchase/resale project involved the purchase of 127 acres of scenic farmland and forest, with most of the necessary funds borrowed from the seller, supportive neighbours, and a local bank. Within a year, the Conservancy resold the land in three parcels, each restricted by a conservation easement to a single house in a specified location. Under the terms of the purchase agreement, the farmer who sold the land originally received one-third of the Conservancy's gain. Even so, the Conservancy was able to gain $80,000 above its costs to put towards other acquisitions, as well as conserving the essential values of the farm. (Russell, 1988, 5)

Purchase/resale operations do not always make a profit, of course, but the cost of protection obtained may still be quite reasonable. In Brattleboro, Vermont, the Vermont Land Trust organized a project to rescue a 144-acre bankrupt dairy farm from developers by using "charitable creditors". Each of 35 individuals, many of them neighbours of the farm, guaranteed a bank loan to allow the Trust to purchase the property. After consultation with a steering committee of these charitable creditors, the Trust sold the open land to be added to two local farm operations. The farm buildings, plus some wooded land restricted to three residential lots, were also resold to conservation-minded buyers. In this case, the Trust recovered approximately 60% of its purchase cost plus expenses, with the remainder being donated by the charitable creditors and other donors. (Stokes and Watson, 1989, 189)

While the Ontario Heritage Foundation has resold to the private sector a restored historic house, protected by a heritage easement, in Dundas, it has not become involved in purchase/resale of natural areas.

3.7.2 Strengths and Weaknesses of Purchase/Resale

The advantages of purchase/resale are straightforward: a substantial portion of the capital invested in property acquisition is recycled into further projects; management and carrying costs associated with holding land are avoided.

The drawbacks of this technique vary with the type of organization sponsoring it. For non-government organizations, the major drawbacks are the amount of capital required to purchase property in the first place, and to cover the risk that resale will leave a substantial shortfall. In Ontario, the inability of non-government organizations to effectively become involved in conservation easement programs also seriously hampers this approach.

For government agencies, the major disadvantage is the amount of time and red tape involved in getting approval to purchase, approval to sever land or register an easement, and approval to sell again. When land is sold by a provincial agency, the funds received are directed back into the provincial treasury unless the purchase and sale take place in the same year. As a result, much of the incentive for an agency to take part is lost.

3.7.3 Applicability to the Greater Toronto Area

If the obstacles posed by the need for capital, for wider abilities to employ conservation easements, and for greater flexibility of action can be overcome, this technique could be widely used within the Greater Toronto Area. In particular, it could be a means of introducing more common use of conservation easements, by overcoming the hurdle of landowner acceptance. Marketing properties encumbered by conservation easements would provide a window into the unknowns of landowner acceptance, as well as case studies on the real reduction in property value associated with easements.

Purchase/resale could be used with most types of greenlands, except those requiring a high degree of public access. It is well suited to natural forestlands, wetlands, and valleylands, and to Oak Ridges Moraine landscapes where scenic and hydrological integrity are at issue. For trail corridors, the retention of ownership of the trail strip, with resale of surplus lands, is more feasible. In some of these cases, registration of a conservation easement to protect the ecological and scenic values of the adjacent lands being sold may also be appropriate.

3.7.4 Incentives for Purchase/Saleback

Because of the approvals process inherent to the operation of provincial Ministries, it is likely that the only real prospect of widespread purchase/saleback is through non-government or special purpose organizations. Even conservation authorities are constrained by their approval process, although there is some possibility that an aggressive conservation authority foundation could act in this role.

To allow non-government organizations to participate effectively in purchase/saleback, the following incentives would be needed:

i) Amendments to the Ontario Heritage Act or other legislation to permit selected non-government organizations to hold statutory conservation easements.

ii) Greater availability of capital, through a revolving loan fund or other means.

iii) Greater access to real estate, legal, and appraisal expertise, perhaps through secondments or partnership programs with other agencies.

iv) Finally, seeing this and other techniques at work first-hand would likely act as a powerful incentive. Sponsored exchanges or field trips to U.S. land trusts by key people within organizations and government could be of great help.

3.8 CREATIVE DEVELOPMENT

Creative or limited development takes the purchase/saleback concept one step further, by incorporating a significant amount of carefully-designed development into the protection equation. This technique has been used primarily by U.S. land trusts, particularly in the rapidly urbanizing sections of New England. In some cases, the trust organizations carry out creative development projects themselves; in others, they advise landowners or developers on creative development techniques.

3.8.1 Examples of Creative Development

A typical example of the creative development process is provided by the Shepley Hill project by the Groton Conservation Trust in Massachusetts. After the death of its owner in late 1986, the 121-acre property including a large farmhouse, horse barn, and high-caliber wooded trails and equestrian jumps, was appraised at over $1.5 million. Local land use regulations would allow developers to subdivide into 30 residential lots, with several miles of new roadways.

The Groton Conservation Trust prepared an alternative plan which retained the equestrian trails, and proposed a total of 11 lots with minimal new road construction. They presented this plan to the estate attorney, and persuaded him to allow them 60 days to undertake a more detailed site analysis and market the limited development plan to local developers. In this case, the estate would be guaranteed the appraised value, plus 90% of any additional funds raised. Both the Trust and the estate attorney could veto any offer.

Six developers inspected the plans and the property; three submitted bids, of which one was subsequently accepted. As a result, the estate received an additional $45,000, the Trust paid its staff and other expenses of some $18,000, and received over $5,000 in addition. As well, the Trust received title to 72 acres from the original parcel as a gift. (Lemire, 1988)

In many cases, creative development projects involve actually purchasing the property outright, and the financial risks are obviously greater than in the example just cited. Sometimes, other objectives such as affordable housing are also involved. One example is the Codman project by the Rural Land Foundation, again in Massachusetts. This 71-acre parcel was purchased with the assistance of loan guarantees, and an appropriate plan negotiated with the Town planning board. The final design included four acres of improved commercial use, 125 affordable housing units on 12 acres, and the remaining 55 acres transferred to the Town's conservation commission as agricultural open space. (Lemire, 1988)

The Natural Lands Trust, based in Philadelphia, Pennsylvania, often works with individual landowners to design limited development projects. Essentially the Trust takes on the role of consultant, within the terms of a contract drawn up for each project. The Trust draws up a number of development options for the owner, including one to show the maximum development permitted within the current zoning using traditional development patterns. Because the landowners involved are generally preservation-oriented, they usually settle on an option which provides some financial return but also protects the significant features on the property.

One recent project of the Trust arranged to have 30 residential lots grouped in clusters on a 103-acre farm, with 65 acres preserved as common open space. Another project involved a 600-acre property which was threatened with development of nearly 300 two-acre lots. However, by shifting the proposed housing into one part of the property, nearly 400 acres of pastoral valleyland were retained as large farm properties. As a result, other neighbouring owners have also pledged to place their lands under conservation easement.

In most cases, owners sell the parts of the property to be developed along with approved plans to developers, rather than undertaking the servicing and construction phases themselves. Not all cooperative projects with private landowners work; in some cases the Trust withdraws because a landowner chooses maximum financial return at the expense of conservation. (Pitz, 1988)

Figure 1: Two Examples of Creative Development

MILL HOLLOW

Delaware County,
Pennsylvania

78 acres

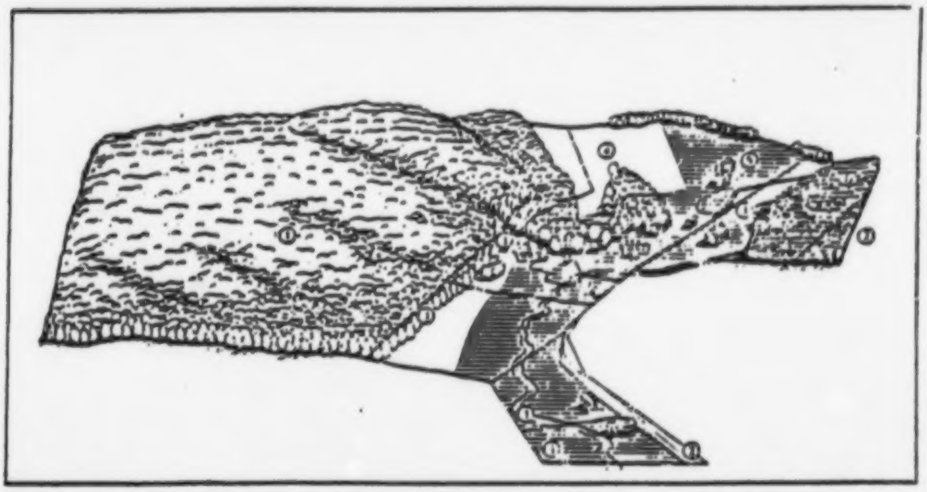
① 48 acres to be conveyed to the Trust

② One acre traded with Township for road right of way and open space

③ Five parcels subdivided, to be sold at market value

④ Owner to retain residence and 15 acres

⑤ The Stream Valley conservation easement area is indicated by hatched lines.



ARBORMEADE FARM

Montgomery County,
Pennsylvania

129 acres

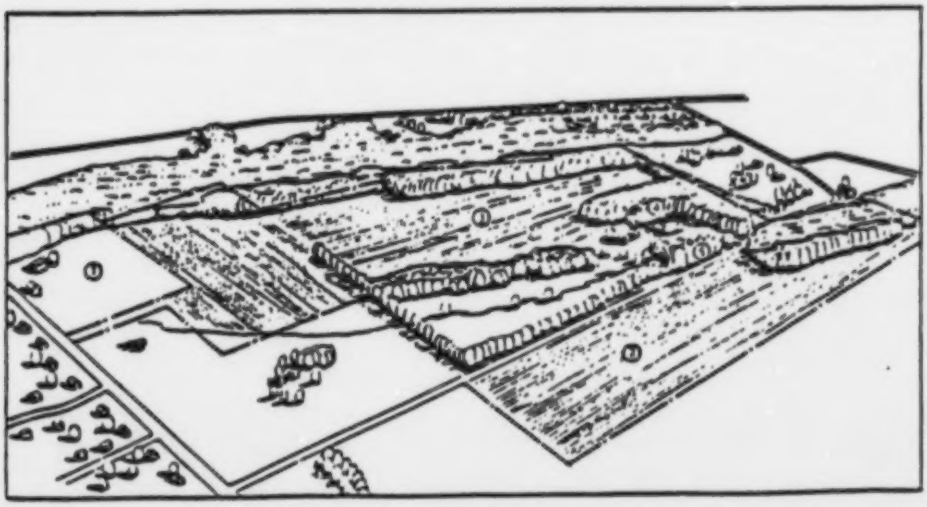
① Tenant house and 13 acres sold with deed restrictions

② 31 acres sold to neighboring non-profit foundation, with deed restrictions. Farming continues

③ Prime agricultural land owned by Trust and leased to local farmer

④ Historic house restored and rented with 12 acres

⑤ Native plant arboretum maintained



Source: The Natural Lands Trust, Inc., 1982

3.8.2 Strengths and Weaknesses of Creative Development

The advantages of creative development techniques are much the same as for purchase/saleback - significant parts of high-value properties are preserved as green space, at a relatively low or no cost to the sponsoring organization or the public purse. In addition, creative development projects provide an avenue for cooperative links with affordable housing policies and organizations. It is notable that the same development pressures which affect greenlands are also a major factor in pushing housing costs out of the affordable range. Several jurisdictions have addressed both concerns in an integrated way, through joint funding or joint projects, and the feasibility of encouraging these linkages could also be investigated within the GTA.

Creative development is no panacea, however. Among its major drawbacks could be listed:

i) The technique clearly involves substantial financial risks, particularly if projects are undertaken directly by trusts or other organizations. An unexpected economic downturn or soft real estate market could very quickly undermine the viability of projects, and leave the organization with unbearable holding costs.

ii) As with purchase/resale, creative development requires access to considerable start-up capital.

iii) The multiple transactions involved and the degree of risk probably mean that this technique would be difficult to administer for government Ministries.

iv) Successfully carrying out creative development projects requires highly-skilled technical staff with knowledge of local real estate markets, the planning process, and the development industry. Such expertise is beyond the scope of most existing conservation groups.

v) In the experience of at least some land trusts, successful creative development at some point requires a subsidy, either through foregone income to the owner, or through cash contributions by community or public groups. A special organization set up to pursue limited development projects in New England, the Land Planning and Management Foundation, failed within a year because of the difficulties in raising these subsidies. (Abbott, 1989, 20) Another factor in the failure of this organization was lack of local knowledge of real estate conditions.

vi) Finally, there is some resistance within the supporting membership of conservation organizations to the idea of trusts or other "preservation" groups becoming involved at all in development, no matter how noble the motives. If the economics of a project dictate a substantial amount of development to pay the bills, a trust organization can be perceived as little better than local developers.

3.8.3 Applicability to the Greater Toronto Area

The applicability of creative development techniques within the GTA is very similar to that previously dicussed for purchase/resale. One significant difference is that properties involved in creative development must contain some developable land, and could not be entirely wetland or floodplain. Creative development would appear to be particularly well suited to the Oak Ridges Moraine, where demand for estate residential lots in a high-quality setting is strong.

3.8.4 Incentives for Creative Development

Again, the incentives listed for purchase/resale apply fully to the introduction of creative development to the GTA. One further incentive might be provincial recognition of the potential linkages between land conservation and affordable housing, along the lines of Vermont's Housing and Conservation Trust Fund. This Fund can make grants, establish lines of credit, make low-interest or no-interest loans, and even participate in projects by sharing in the "profit" or "loss". Eligible projects relate to provision of affordable residential units, including rentals, retention of agricultural lands, protection of wildlife habitats, natural areas, and recreation lands, and preservation of historic properties. Many projects incorporate several of these objectives. (Bradley, 1988)

The primary requirement for experimenting with creative development within the GTA, however, is the establishment of an organization which has the flexibility, the ability to take risks, the capital, and the expertise to undertake major projects.

3.9 CONSERVATION REAL ESTATE

Conservation real estate, eco-realty, or conservation buyer programs (CBP) as they are sometimes known, involve the practice of encouraging conservation-minded private buyers to purchase greenlands that are up for sale when no other alternative approach appears possible. Often the sale of such lands is combined with limited development or easements.

3.9.1 Examples of Conservation Real Estate

There are a number of examples of this technique in practice, primarily in the United States. Typically, when a land trust is unable to finance a land purchase, it turns to finding a conservation-minded buyer instead, often persuading the buyer to donate a conservation easement to ensure protection of the site. Such programs are run by the Big Sur Land Trust, the Montana Land Reliance, the Iowa Natural Heritage Foundation, and the Jackson Hole Land Trust among others (Clark, 1989).

These organizations build up lists of prospective buyers, and then when properties come up for sale, attempt to link buyers with properties. In successful cases, the property ends up in private ownership, purchased entirely with private funds, but the land trust gains a conservation commitment in the form of an easement.

In at least one case, a private profit-making real estate firm operates along these principles. Paul Brunner runs a firm called Eco Realty in Montana, specializing in conservation sales, often involving large acreages in western ranches (Brunner, 1982).

3.9.2 Strengths and Weaknesses of Conservation Real Estate

The major weakness of this approach is lack of experience in the Ontario. While there is positive evidence of its success in a few U.S. cases, experience there is admittedly limited as well.

A second disadvantage is legal complexity. With the possible involvement of a real estate agent and his commission, an easement, and an organization to hold the easement, some transactions could become quite complex.

The major advantage of the technique is that it is entirely based on the use of private funds to achieve conservation. It is also typically used when land prices have soared beyond the possibility of public acquisition. It therefore has the potential to handle cases where land values are very high, an important point for the Greater Toronto Area.

3.9.3 Applicability to the Greater Toronto Area

The concept of conservation real estate or a conservation buyer program is appealing in the Ontario context for three reasons. First, the authors have encountered several potential `conservation buyers' during the recent past. The Natural Heritage Stewardship Program for example, has been approached by four different individuals wishing to buy a country property, and is currently attempting to link one such buyer with a property for sale. It appears that with even a little effort, a list of potential conservation buyers could easily be constructed.

Second, this technique has the potential to handle the high land values of the GTA. For greenlands where public access in not required, such private purchases might be quite acceptable. This also uses entirely private funds, saving limited public acquisition funds for other land parcels.

Third, this technique provides a unique positive linkage to the real estate industry. It could be carried out cooperatively with real estate brokers, avoiding the usual conflict of preservation versus development. Making use of the energy and enthusiasm of the real estate industry would certainly be an innovative step.

This approach might not function effectively where there is a need for public access to land or for direct public management of land. But for other greenspace types, such as lands providing ecological functions or rural landscapes, this technique would be quite useful.

3.9.4 Incentives for Conservation Real Estate

Little is needed in the way of incentives for this approach to function effectively. It relies on the commitment of a conservation-minded buyer who has already decided on purchasing a parcel of land for personal reasons.

Two key missing links in Ontario which would be required are some form of organization such as a land trust to undertake the organization of such a scheme, and the availability of simple, acceptable conservation easements which could be held by such non-government organizations.

For more complicated transactions involving donation of easements or limited development, an appropriate income tax receipt for the donated value of an easement would be a small but critical necessity.

3.10 LAND TRUSTS

In many jurisdictions, landowners and conservationists interested in promoting stewardship and other protection techniques have joined together to form organizations commonly known as trusts. Over 700 land trusts are now active in the U.S. Trust organizations are common in Britain, both at the national and county level. Various types of trusts also exist in several Canadian provinces. A recent study provides a detailed profile of trust organizations and their potential in Ontario (Reid, 1988). The emphasis of the following section is on how land trusts can function within a near-urban setting.

3.10.1 Examples of Land Trusts

Many land trusts in rural areas become heavily involved in the acquisition of land and conservation easements, often through donations. The Vermont Land Trust, for example, has been involved in the permanant protection of approximately 25,000 acres, mostly through donation of conservation easements, purchase/saleback, and creative development projects. Some Trusts act primarily as facilitators. The Maine Coast Heritage Trust, for example, has been instrumental in the protection of 27,000 acres, including 130 entire islands, by acting as a broker between landowners and appropriate government agencies.

In areas where land values and development pressures are high, the ability of private land trusts to purchase land or to solicit donations of land and easements becomes progressively less. In many of these areas, trusts become involved in joint government/non-government programs to achieve their goals. The administrative and funding arrangements for these joint programs vary considerably.

One example is the Open Lands Project, a conservation group created 25 years ago in Chicago. As part of its broad agenda of preserving and developing recreation and conservation resources, Open Lands Project formed an affiliate called the Corporation for Open Lands, or CorLands. This affiliate assists local governments in buying lands for open space uses, holding desired lands for up to three years. During that time, the government agency makes arrangements to purchase the lands from Corlands, and assumes management responsibilities through a lease arrangement.

Open Lands Project was instrumental in developing the 120-mile Illinois and Michigan Canal National Heritage Corridor on a historic transportation canal. Sixty miles of the canal are now a state park; the trust is working with government, industry, and citizen groups along parts of the remainder to develop the area as a greenway in association with economic revitalization. (Adelmann, 1988)

A system of 15 local land trusts on Cape Cod, which is experiencing phenomenal development pressures, also works closely with Town and State governments on projects. For example, the Orleans Conservation Trust acquired and held a waterfront property until the local Town had sufficient time to raise the necessary funds. The 300 Committee, a trust based in the Town of Falmouth, set a goal of acquiring 300 acres of open space to mark the Town's 300th birthday. The Committee covered the initial costs of survey and appraisals, and negotiated purchase agreements for nine parcels totalling $8.3 million. The necessary funding was then ratified by the Town, and the purchases completed.

In a similar way, the Truro Conservation Trust negotiated the purchase of a $3.25 million seashore property for the Town, contributed the associated appraisal costs, arranged federal and state funding contributions, and even arranged an interim owner when necessary. (Robinson, 1989)

This "broker" role of land trusts has been more formally recognized in the State of New Hampshire, through the creation in 1987 of the Trust for New Hampshire Lands. In this case, the Trust was set up specifically to administer a proposed $50 million State investment in open space, aiming to protect at least 100,000 acres over five years. The operating costs of the Trust are completely funded by over $3 million in private donations, allowing all of the State funding to go directly to acquisition of land and easements. In its first year of operations, the program protected 63,000 acres, 80% of that through conservation easements.

In New Hampshire, the role of the Trust is to create interest in the program, provide guidance to landowners and communities in constructing applications, and present project proposals to the State board which approves expenditures. Six land agents employed by the Trust work in local areas to explain the program and negotiate purchases with owners. Towns and cities apply for "local match" projects, with the local half-share coming through a combination of municipal or private funds, and/or sales by the landowners at less than full market value.

Donated lands or easements elsewhere in the community can also be credited as a local match contribution, a unique feature of this program that encourages widespread involvement. Because the degree of local match funding is a criteria for assessing projects at the State level, many project proposals incorporate substantially more local contribution than the minimum 50% requirement. (Levesque, 1989)

Another example of public/private partnership is the system of Groundwork Trusts established by the Countryside Commission in Britain. A national government body, the Countryside Commission seeks to maintain the natural beauty of the countryside, and to help people enjoy it through such means as long-distance walking trails. Much of the work of the Commission is carried out through joint projects with local municipalities or voluntary groups, often involving grants for management work on private lands.

In the past several years, the Commission has worked to remove some of its "countryside management" projects from under the control of local governments, and to involve a wider cross-section of society. Through a central Groundwork Foundation, a system of 17 local Groundwork Trusts has been established, each as an independent charitable organization. The boards of these Trusts include local Council members and representatives from industry, commerce, and the voluntary sector. To strengthen the business skills of these trusts, executives from various major industries have been seconded to serve as temporary staff members.

Funding for trust projects is raised partly from business, partly from local communities, and partly from government. In particular, sponsorships from industries wanting to enhance their "green" image have been encouraged. Many trust projects are aided through grant support from the Countryside Commission or employment programs. (Bucknall, 1989)

3.10.2 Strengths and Weaknesses of Land Trusts

Based on experience with trust organizations in other jurisdictions, a number of advantages become apparant:

i) As non-government bodies, or at least at arms-length from government bureaucracy, trusts are able to act quickly and with flexibility in responding to open space conservation needs. This flexibility can be very advantageous in negotiating land purchases or easements with private landowners, and in making arrangements for long-term care and management of protected areas. It also allows trusts to act quickly when necessary, and to make use of the full range of stewardship options presented in this report.

ii) In most cases, trust organizations appear to have built a high degree of landowner and public support, giving them credibility with potential donors and volunteers. In part, this support seems to be related to the general profile of trusts as "non-government", in an age when the size of government is often criticized. In part, it comes because trusts have a clearly-defined purpose - they are "land-savers", with that role undiluted by other regulatory or resource management duties. In many cases, trusts have enhanced that clarity of purpose by tying their activities to a well-known or accepted geographic region, rather than any artificial political boundaries.

iii) By their nature, trust organizations are more likely to try innovative techniques, especially those suited to the trust's particular area of interest. This kind of innovation, using such techniques as conservation easements and purchase/resale, seems to be particularly difficult for traditional government conservation agencies.

iv) In many cases, trusts have used their flexibility and profile to act as an "integrator", building linkages between the programs of various agencies and landowners to achieve maximum benefit. This role is particularly valuable if the trust can present itself as an organization rooted in the interests of the conservation-minded landowner. In effect, the trust offers its landowner members "one-stop shopping", by directing members to the existing services and programs most suitable to their needs. At the same time, the trust can encourage other groups and agencies to work in a more unified and coordinated fashion.

v) Perhaps the greatest advantage of credible, regionally-based trusts is their potential to attract new donations of land, money, services, and volunteer labour. The extent of this attraction depends in large part on the credibility, profile, and methods of the trust, but there can be no question that the total can be substantial.

The concept of land trusts in Ontario has been generally well-received, but several drawbacks have been identified:

i) Provincially or regionally-based trust organizations could compete to an unknown extent with existing conservation organizations. The primary concern, or course, is potential competition for donated funds from business and individuals. This is a concern of at least some conservation authority foundations, as well as some existing conservation groups. Competition could also extend to memberships, and to a degree, the perceived influence of organizations.

Related to this is the possibility that trusts will add more confusion to an already complex array of private and government conservation agencies. Unless separate trust organizations can add significantly to conservation objectives, their role might better be merged with existing agencies.

ii) There is a risk that trust organizations would become chronically-underfunded, and subsequently weak in administrative skills and effectiveness. In particular, the required core funding for administrative functions, along with management and maintenance funding for land or easements, are difficult to raise in the private sector. Some trusts overcome this difficulty in part by adhering to a policy that requires raising an additional 20-25% above the direct costs of acquiring a property to provide for its ongoing costs. In some cases, government provides assistance with core funding for trust organisations.

3.10.3 Applicability to the Greater Toronto Area

A private or joint public/private trust organization, or a series of such organizations, could add much to efforts to preserve greenspace in the Greater Toronto Area. At least three options for trust organizations could be considered for the GTA, either singly or in combination:

First, it would be possible to establish for the entire GTA a body not unlike the British Countryside Commission - perhaps even called the GTA Countryside Trust. This body, which could be set up as a provincial agency with an appointed board of directors, would not be involved directly with land purchase or management. Rather, it would act as a coordinating agency to ensure that the opportunity to create a green infrastructure for the GTA was not lost, working both through existing government agencies and non-government groups. Like the Countryside Commission, it would work to raise public awareness of the values of greenspace, encourage stewardship and local initiative in securing natural and recreational areas, and provide grants-in-aid to various greenspace projects.

To be most effective, it might be described as an advocate for greenspace protection, and as a deal-maker on the side of the natural environment when major decisions were being considered. To add to its leverage, the GTA Countryside Trust could also be the administrator of a Greenlands Trust Fund, which could provide financial assistance to projects of conservation authorities, municipalities, and non-profit groups, as described later in this report.

As a second option, one area in particular - the Oak Ridges Moraine-would appear to be an ideal location for the establishment of a regionally-based trust, either private in nature, or some form of arms-length provincial agency. This Trust would endeavour to create a high public profile and a substantial public membership, and would become actively involved in land stewardship or acquisition projects.

An Oak Ridges Trust would have several advantages:

i) The Oak Ridges Moraine provides a region large enough to support a professionally-staffed trust organization, yet small enough so that the Trust could become familiar with its resources, and so that landowners could perceive the Trust as "local".

ii) The Moraine is a feature that can be identified relatively clearly in a geographical sense, and increasingly has a distinct identity in the public's mind.

iii) The Moraine crosses a multitude of jurisdictional boundaries, with no one agency able to view it as a cohesive entity. Unlike river valleys, which fall clearly within the purview of conservation authorities, the mandate for conservation activities along the Moraine is fragmentary and confused.

iv) The pattern of land ownership and use along the Moraine is conducive to many of the activities carried out by land trusts. A good many rural owners in this setting are likely to be sympathetic to private stewardship of their lands, as well as to efforts to maintain the natural beauty and quality of the landscape in general. The pattern of agricultural and rural estate land uses hold the potential for developing conservation easements that will limit future change while encouraging existing uses to continue. The real estate market is sufficiently active to permit the use of purchase/saleback or creative development techniques.

v) While it is not realistic to expect Trust programs on the Moraine to be entirely self-financed, the region has a sufficient concentration of affluent landowners, and sufficient proximity to the urban centre, to have the potential for considerable donated funds.

vi) Finally, in terms of conservation programs and landowner attitudes, the Oak Ridges Moraine can start in a relatively friendly, or at least neutral, climate.

Depending on the structure and mandate chosen, the Trust could employ a variety of approaches to the protection of significant areas, rural landscapes, and recreational trails and corridors. A detailed analysis of the structure and funding of such a trust, and of steps leading to its establishment, are beyond the scope of this report. A recent study on the feasibility of a trust for the Niagara Escarpment could provide some direction in that regard. (Reid, 1988)

A third option is the formation of other community-based trusts on a smaller scale. Because one of the strengths of trust organizations is their flexibility to adapt to local needs and conditions, it is neither desirable nor necessary to develop a standardized approach to their structure or mandate. However, experience in jurisdictions such as Maine, Vermont, and Massachusetts has shown that local trusts can benefit greatly from the presence of a related regional organization that can provide advice, technical assistance, and sometimes financial assistance. In the GTA, that role could potentially be provided by a GTA Countryside Trust, an Oak Ridges Trust, or some other body.

3.10.4 Incentives for Trust Formation

A number of incentives could be provided to ensure the success of one or more trust organizations within the GTA, and to enhance their effectiveness. In large measure, the specifics of those incentives will depend on the nature of the public/private partnership in the trusts' organization.

One set of incentives should relate to the tools available to such trusts. The existing impediments on the use of conservation easements, for example, need to be removed. In terms of attracting donations, the trusts could have some advantage by being arms-length provincial government agencies, because of the income tax advantages of donating to the Crown rather than to a charity. However, a trust organization which was required to comply with the cumbersome government appraisal and approval process for land transactions would lose much of its flexibility in other ways.

The kind of financial incentives provided to the trusts would also depend largely on the organizations' role and mandate. At a minimum, extending the Conservation Lands Tax Rebate program to include lands owned by or under easement to the trusts would be helpful in minimizing ongoing costs. Providing assistance with core administrative costs, either through an annual allocation, or through a one-time endowment, would be another key step to allow the trusts to focus their energies on direct conservation activities. One interesting alternative is the New Hampshire approach, where administrative funds were raised privately in return for a substantial infusion of government funds for capital projects.

Certainly, if the GTA trusts are expected to be major players in conserving green space through acquisition or stewardship, a source of substantial public funding for projects should be available, preferably on a matching basis. This might be done by the specific allocation of certain revenues to a Greenlands Trust Fund similar to those used in states like New Hampshire, Vermont, and Michigan. As shown in Appendix 10, a wide variety of funding sources have been used to finance greenland protection. Among those that could be considered in Ontario are included:

- interest income from a one-time Provincial endowment;
- profits from the development of provincial and federal lands within the GTA;
- a special levy on utilities, roadway and sewer projects, and private developers, collecting a set amount for each acre of natural habitat destroyed;
- a special Greenlands levy above the normal parklands dedication during development;
- a special Greenlands levy added to the land transfer tax;
- an allocation from an existing or new provincial lottery.

Several other incentives could be useful in assisting the formation of trust organizations in the GTA. The development of a trust handbook, which is currently under consideration by the Natural Heritage League, would bring the lessons from other organizations to newly-formed trusts. The convening of a conference or series of workshops, to explore the need and potential role of trust organizations, and to encourage local initiative in their formation, could be another incentive to action. In some cases, workshops might explore whether existing organizations such as conservation authority foundations or nature clubs could modify their role to act as trusts.

The value of exchange programs, to allow key people to assess first-hand the experience of other trust organizations, could also be considered an incentive to action. For example, the U.S. Land Trust Exchange sponsors a Peer Match program which might be extended to Ontario to bring experienced trust staff to fledgling organizations here.

3.11 DESIGNATION

Designation refers to the process of designating historic buildings or districts under Ontario's Heritage Act. At present this process does not apply to natural heritage sites, but this extension of the concept is being considered in the present Heritage Policy Review.

3.11.1 Examples of Designation

The best example of designation is the widespread program of designating historic buildings in Ontario under the Heritage Act. This tool has been highly successful over the past two decades. The process in locally based, with municipal councils having the power to designate buildings. Normally this is done based on the advice of a Local Architectural Conservation Advisory Committee (LACAC) appointed in the municipality.

Designation does not permanently protect a structure, but it does have a strong moral suasion influence on property owners. Many owners view designation with a distinct sense of pride. Designation also makes property owners eligible for a pool of matching grant funds for specific forms of renovation and maintainence, provided it is done with historic conservation in mind. This financial incentive is important for some owners.

The overall process, including the deliberations of LACACs, has a strong educational influence at the local community level. It is probably fair to say that this program has done more than anything else to spur local interest in our cultural and historic heritage over the past two decades. In this sense, regardless of the number of buildings designated, the program has been very successful.

3.11.2 Strengths and Weaknesses of Designation

Extension of the designation process to natural heritage as well as built heritage could be expected to extend most of the advantages and shortcomings of the present program as well. Designation does not provide permanent protection, since a property owner can opt out, and merely has to wait for a number of months before he is free to demolish or otherwise change his property. On the other hand, it provides a strong moral incentive, and some financial incentive for conservation. It is locally based and controlled, a politically acceptable process.

3.11.3 Applicability to the Greater Toronto Area

This technique appears to have significant potential value for conserving greenspace in the GTA, although it would require amendments to the Ontario Heritage Act. It would not be expected to deal with very large numbers of properties, but would add a tool for conservation agencies or organizations that has already worked successfully for built heritage in an urban setting.

3.11.4 Incentives for Designation

In most cases, designation under the Ontario Heritage Act makes a property owner eligible for matching grants of up to $2000.00 if the work planned meets certain criteria. A plaque or a recognition award could also be a valuable incentive in some cases. Many of the incentives described earlier for other stewardship techniques could also be linked to designation.

3.12 DEDICATION

Dedication is a process used in many U.S. states, whereby a private landowner can "dedicate" his land, normally in perpetuity, for conservation purposes. It requires enabling legislation at the State level, but with such legislation is an extremely strong protective tool.

3.12.1 Examples of Dedication

Dedication is considered by Hoose (1981) as the strongest form of conservation protection available. Typically, an owner `dedicates' his land into a state system of nature preserves, and the legal impact is like donating an easement. Most legislation is set up in the strongest wording possible, so that use of the land, even for a public work, is subject to proof of unavoidable necessity and subject to public hearings. Illinois passed the first enabling statute in 1963.

In fact, most of the properties dedicated during the first two decades' experience in the U.S. have been public properties, where the dedication adds a legal strength to the conservation commitment of the agency owning the land. However, most authors seem convinced that this technique has great promise with private landowners.

Under U.S. common law, this technique depends on the concepts of `dedication' and `public trust'. Pearsall has gone as far as reviewing the legislation from 12 states, and proposing an ideal Dedication Act (Pearsall, 1984). However, it is not clear how such an approach would fit within the Canadian legal context.

Dedication is a very strong tool, but would also require new legislation to be operational in Ontario. If put in place, it would not be expected to deal with large numbers of properties, but it would be a very strong tool for dealing with critically important sites.

3.12.3 Applicability to the Greater Toronto Area

Dedication would appeal to a very small number of committed landowners, who valued the natural features of their properties highly and were willing to go to great lengths to ensure their protection.

3.12.4 Incentives for Dedication

With dedication in most U.S. states, property taxes are reduced or eliminated. While altruism and love of the land are the primary incentive for landowners considering dedication, favourable public recognition may also be a factor for some.

4.0 DELIVERING A STEWARDSHIP PROGRAM

4.1 Integration and Implementation

The twelve land stewardship options presented in this report provide a range of innovative techniques to encourage the protection of open space in the Greater Toronto Area. They open the door to new approaches to landowners and the public, and to financing conservation activities. They complement land use planning and acquisition approaches, rather than replacing them.

Together this package of land stewardship options provides an entirely new dimension to the conservation of greenlands in Ontario. They are particularly important in bringing a flexible range of options which can involve landowners and properties in a wide variety of circumstances. They hold the promise of protecting more acres at less cost than any program based solely on acquisition. They are politically positive, and provide for the constructive involvement of local communities and landowners.

As shown in the accompanying chart, the first six techniques are oriented towards persuading landowners to practice conservation. While the lower levels of this group are not in themselves enough to provide long term protection of sites in an urban fringe setting, they do provide important starting points for building positive relations with landowners and local agencies. They also provide a practical way to categorize owners and establish further priorities.

Among these techniques, both verbal stewardship agreements and simple management agreements may be especially positive tools for encouraging long term commitments. The eventual aim of stewardship programs in the GTA should be to persuade landowners to enter a written agreement, such as under the tax rebate program, or better yet, to donate a conservation easement or land itself.

TABLE 1: SUMMARY OF LAND STEWARDSHIP OPTIONS

1- **Information and Education:** a key element of any private stewardship program, especially as a positive starting point; does not provide protection by itself.

2- **Verbal Stewardship Agreements:** a convenient, efficient vehicle for initial involvement of landowners; useful for sorting landowner commitment; does not provide final protection.

3- **Written Stewardship Agreements:** probably the most useful voluntary private stewardship technique; would provide long term protection with many landowners.

4- **Management Agreements:** do not provide permanant protection, but a practical vehicle for building commitment of sympathetic landowners over the longer term; allows both volunteer and agency involvement with landowners.

5- **Leases:** a specific technique for use as a holding mechanism or in other special circumstances.

6- **Conservation Easements:** the key permanant protection option under stewardship; an essential tool to achieve strong legal commitment; requires legislation and improved implementation.

7- **Purchase/Saleback:** one of the central techniques for involvement in creative development; one of the strongest and most practical options in a rapidly urbanizing setting.

8- **Creative Development:** one of the most promising approaches for general application in an urbanizing region; requires access to conservation easements and a strong implementing organization.

9- **Conservation Real Estate:** a specific but strong tool which could be implemented to complement other approaches.

10- **Land Trusts:** non-government or arms-length organizations that could take a lead role in open space conservation; widespread success in U.S.; key organizations to make land stewardship function successfully.

11 and 12 - **Designation and Dedication:** specific techniques which would expand stewardship options, but require new legislation.

In order for such an integrated package of techniques to be effective, four changes to present conservation programs in the Greater Toronto Area are essential:

i) The Conservation Lands Tax Rebate Program should be expanded to deal with other types of greenspace beyond those natural areas now covered. It should also be changed somewhat in emphasis, to include an educational role as well as its present administrative function.

ii) A simple, general purpose Greenspace Management Agreement, or Natural Heritage Management Agreement, should be developed. This agreement should be available especially for the many rural landowners who value their natural landscapes, but who do not want single purpose management for forestry or other resource management fields.

iii) Perhaps most essential is legislation to enable non-government organizations, conservation authorities and municipalities to enter into conservation easements, preferably in a simplified form.

iv) Finally, financial support and policy and technical guidance must be provided to agencies that want to develop and administer private land stewardship programs. This support could be provided by an existing provincial agency, by a revamped Natural Heritage League, or by a new umbrella organization such as a "GTA Countryside Trust".

The upper-level stewardship options, numbers 7 through 12, rely not so much on voluntary private stewardship as on combinations of stewardship, acquisition, and development, with the legal restrictions provided by conservation easements playing a key role. Design and implementation of appropriate legislation to enable widespread use of conservation easements is therefore an important ingredient of this part of the package as well.

The concept of creative development captures the spirit of this group of conservation techniques clearly. They involve a major innovation in greenspace conservation, by calling on conservation agencies to become directly involved in the land development process.

Central to the success of many of the techniques described is the operation of non-government, or at least "arms-length" land trusts. Initial endowment financing of such organizations would be one of the most practical steps towards greenspace conservation in the GTA. Land trusts in the U.S. have proven to be innovative, efficient, and productive organizations that release the creative energy of many local citizens.

4.2 Delivery Agencies for Stewardship

Stewardship programs could be delivered by at least four kinds of agencies - municipal, conservation authority, provincial, and non-government. Some stewardship options are considerably more suited for particular delivery agencies than others, depending in part on the related programs and the flexibility of the agencies involved.

While some municipalities recognize greenlands and work with advisory committees to protect significant environments, municipalities have not made extensive use of stewardship techniques to date in Ontario. The District Municipality of Muskoka is currently initiating a natural heritage protection program which includes private land stewardship. Municipalities either at the local or regional level which want to place particular emphasis on green space conservation could certainly make use of such lower level techniques as information and education and verbal or written agreements. As noted previously, there is some evidence to suggest that working cooperatively with landowners can reduce opposition to municipal land use controls.

Conservation authorities must be considered likely agencies to develop and administer land stewardship programs at the regional level. Many conservation authorities already offer management assistance to landowners, and their breadth of program interests allows them to address an integrated approach to landscape management. Most conservation authorities have not yet had an opportunity to build up expertise with stewardship techniques, and are constrained by concerns about funding, uncertain mandates for green space and natural areas conservation, and the ability to negotiate conservation easements. As well, the provincial approval process required for real estate transactions makes Authority participation in higher level techniques such as purchase/saleback more cumbersome.

Conservation authorities now play a vital role in the regulation of valleylands and the acquisition of natural areas, a role that should be expanded and strengthened. Stewardship techniques which complement these existing roles are a logical next step for conservation authorities.

Provincial agencies already play some role in private land stewardship, through management agreements, tax rebates, and a small emerging program of landowner contact for verbal stewardship agreements. The Ontario Heritage Foundation, a provincial agency, continues to experiment with conservation easements. These programs have considerable value, and should be expanced and strengthened wherever possible, particularly in relation to provincially significant sites. However, there are likely to be a significant number of landowners who will resist stewardship agreements with "big government". As well, the unweildy procedures of provincial agencies effectively bar them from using several of the higher level stewardship options.

Most non-government organizations lack the resources or the expertise to successfully deliver major stewardship programs. However, the Natural Heritage League, a cooperative body including both government and non-government members, has been the primary sponsor of most of the stewardship innovations in Ontario over the past five years. This kind of cooperative approach, likely expressed in the form of land trusts, should be a key feature in the development and implementation of a stewardship program for the GTA.

4.3 Relationship to Acquisition

Private stewardship approaches clearly complement, rather than replace, acquisition as a basic tool for conserving greenspace. In fact, several U.S. states have established very large budgets for acquisition of open space, at the same time as using other tools such as easements *(See Appendix 10)*.

The State of Massachusetts, for example, spends over $75 per capita per year on land conservation programs; other New England states average between $22 and $37 per capita. Direct comparisons with Ontario are difficult, but if we spent even $30 per capita, we would have an annual land conservation budget of some $270 million (U.S.).

However, it should be emphasized that a private stewardship program can enhance public acquisition in a range of ways. Stewardship can lay the foundation for eventual donations of land or easements, and can provide a vehicle for discussion of such innovative mechanisms as partial donations, reserved life estates, or donations of land with cash endowments. The long term positive attitudes generated by a stewardship program can do much to raise the effectiveness of associated acquisition programs.

Thus, while land stewardship is an important component of an overall Greenlands Strategy, it should not be viewed as the only component. A major commitment of funds for land acquisition should also be part of a Greenlands Strategy for the GTA, especially where greenspace with public access is desired.

4.4 Relationship to Land Use Planning

Private land stewardship options also complement land use planning programs, including conservation authority valleyland regulations. Past experience with Ontario's Natural Heritage Stewardship Program suggests that a community is more receptive to land use planning regulations to protect natural areas if landowners have first been introduced to the importance of the area through stewardship.

Similarly, local or regional municipalities might be given provincial direction to pursue greenlands protection more vigorously, and be given access to a designated pool of funds as an incentive for stronger local initiative. The key element here is attitudes. A stewardship program tends to foster an attitude of working with landowners and communities rather than merely regulating them. In the long run, the two approaches are complementary.

One proven method for increasing the commitment of municipalities at the regional level to greenlands protection is the establishment of Environmental Advisory Committees. These Committees, which are active in the Regions of Waterloo, Halton, and Niagara, assist the municipality in identifying significant natural areas, and in ensuring that the planning process takes into account their ecological values. While the Committees do not directly make use of stewardship techniques, their influence certainly contributes to a more caring attitude by both landowners and municipalities, as well as providing a valuable source of technical advice. Certainly Environmental Advisory Committees are one municipal initiative which could be encouraged across the GTA.

5.0 PRIORITY RECOMMENDATIONS FOR STEWARDSHIP AS PART OF A GREENLANDS STRATEGY

RECOMMENDATION ONE:

An integrated system of stewardship options, as outlined in this report, should be adopted as an essential part of the GTA Greenlands Strategy. Such a system would be complementary to land use planning and land acquisition.

RECOMMENDATION TWO:

The Ministry of Natural Resources, in cooperation with the Natural Heritage League and conservation authorities, should adopt a more integrated approach to greenlands management within the GTA, including an integrated, ecologically based management agreement suitable for use with a broad range of landowners of significant natural areas.

RECOMMENDATION THREE:

The Ministry of Natural Resources and the Ministry of Municipal Affairs should extend the Conservation Land Tax Reduction Program to apply to all regionally significant natural areas, any lands affected by a conservation easement or long-term management agreement, or any lands owned by land trusts or conservation organizations and managed for their natural values.

RECOMMENDATION FOUR:

The Province should introduce legislation to extend the authority to negotiate and hold statutory conservation easements to conservation authorities, municipalities, and non-profit conservation groups including land trusts and foundations.

RECOMMENDATION FIVE:

The Ontario Heritage Foundation and other involved provincial agencies should encourage the use of conservation easements for securing natural areas by:

i) reviewing and simplifying the model conservation easement, in conjunction with external legal and agency advice;
ii) providing equivalent incentives to those available for built heritage conservation, such as funds available for grant assistance; and
iii) assisting legal, appraisal, and real estate professionals to develop appropriate and efficient techniques in support of the evaluation of easements for tax receipt purposes.

RECOMMENDATION SIX:

The Province should establish one or more trust organizations with specific responsibilities related to greenlands and landscape conservation through stewardship and community action. The form of these trusts could include a GTA Countryside Trust modelled after Britain's Countryside Commission, a project-oriented Oak Ridges Trust, and/or a series of community-based land trusts. Community-based trust initiatives should be encouraged by assisting in the development of a trust handbook and appropriate workshops, and by providing technical advice and assistance.

RECOMMENDATION SEVEN:

The Province should establish a Greenlands Trust Fund, administered by a provincially-appointed board. The Fund should provide financial support for stewardship programs, including provision of low-interest loans to organizations undertaking purchase/saleback or creative development projects. Municipalities, conservation authorities, and non-profit conservation organizations including land trusts should have access to the Trust Fund for suitable projects. Funds should be granted on a matching basis, using the degree of local match as one criterion for project selection, but allowing local match to include donated properties or easements anywhere within the community.

References

Abbott, Gordon Jr. 1989. Land Trusts: Innovations on an Old New England Idea. *New England Landscape*, Vol.1, 1989, 13-24.

Adelmann, Gerald W. 1988. Open Lands Project: Chicago Illinois. *Exchange* 7(3):9.

Bradley, Darby. 1988. A Promising Marriage of Public Interests: Vermont's Housing and Conservation Trust Fund. *Exchange* 7(1):10-11.

Brunner, P. 1982. Conservation Real Estate. In *Private Options: Tools and Concepts for Land Conservation.* Island Press, Covelo, Calif.

Bucknall, Sally. 1989. Landscape Conservation in Britain. Presentation to Royal Commission on the Future of the Toronto Waterfront. November 1989. Mimeo.

Clark, S. 1989. Conservation Buyer Programs. *Exchange* 8(1):11-13.

Collins, Jeremy M. 1989. Conservation Easements: An Overview. Prepared for the Royal Commission on the Future of the Toronto Waterfront. November 1989. Mimeo.

Cox, K. 1985. Wildlife Conservation on Private Land. Wildlife Habitat Canada.

Diehl, Janet and Thomas S. Barrett. 1988. *The Conservation Easement Handbook*. Trust for Public Land and the Land Trust Exchange, Alexandria, Virginia.

Emory, Ben. 1984. Guest Editorial. *Natural Areas Journal* 4(3):5.

Hoose, P.M. 1981. *Building an Ark*. Island Press, Covelo, Calif.

Hoose, P.M. 1984. Features of The Nature Conservancy Registry Programs. *Natural Areas Journal* 4(3):26-28.

Levesque, Charles. 1989. The Trust for New Hampshire Lands. *Exchange* 8(2):10-11.

Lemire, Robert A. 1988. An Overview of an Innovative Land Protection Technique. *Exchange* 7(4):1-6.

Matthei, C. 1984. Criteria for Community Land Trusts. In: *Land Saving Action*. R.L. Brenneman and S.M. Bates (eds.) . Island Press, Covelo, Calif.

Pearsall, S. 1984. Public Dedication of Nature Preserves. *Natural Areas Journal* 4(1):11-23.

Pietraszko, L.J. 1984. Landowner Attitudes Toward Wetland Values and Protection Methods. Contract File No. 02E.KE403-3-0077. Environment Canada.

Pitz, D. Andrew. 1988. Helping Landowners Implement Limited Development Projects. *Exchange* 7(4):11-13.

Reid, Ron. 1987. *Conservation Easements Implementation Project*. Ontario Heritage Foundation, Toronto.

Reid, Ron. 1988a. *Bringing Trust to Ontario*. Federation of Ontario Naturalists, Don Mills.

Reid, Ron. 1988b. *A Trust for the Niagara Escarpment: A Study of Concept and Feasibility*. Ontario Heritage Foundation, Toronto.

Robinson, Mark H. 1989. Cape Cod Land Trusts Respond to Development Boom. *Exchange* 8(4):19-20.

Russell, Joel. 1988. Dutchess Land Conservancy; Bangall, New York. *Exchange* 7(3):5.

Schwartz, Kathleen. 1985. A Case Study - The Charles River. *Exchange* 4(3):12.

Stokes, Samuel N. and A. Elizabeth Watson. 1989. *Saving America's Countryside*. John Hopkins University Press, Baltimore.

Wildlife Habitat Canada. 1989. Wildlife Habitat Canada and Private Stewardship: A Brief Outline of the Foundation's Current Private Stewardship Program. (Mimeo).

THE BIG CREEK MARSH

The Big Creek Marsh area in Essex County is the largest wetland in the county. The site itself is located southeast of Amherstburg in Malden Township and encompasses approximately 2050 acres. Of this total area, 350 acres is farmland, 450 acres is forest cover and the remaining 1250 acres is marshland. The Big Creek Marsh is important because of this interspersion of habitats suitable for various forms of wildlife throughout Essex County. Biologists have said that the marsh provides an excellent representation of cattail marsh, swamp forest, thicket swamp, upland and forest communities. The Big Creek marsh has one of the best shoreline cattail marshes in southwestern Ontario. It has a low barrier beach through which Big Creek flows emptying into Lake Erie, W. of Holiday Beach Provincial Park. The average water depth in the marsh is .5 metres.

The marsh itself lies in the path of 2 major bird fly-ways, those being the Atlantic and Mississippi. The area is also home to one of two active Bald Eagle nests in the county. Of prime importance in this area is its attraction to waterfowl. Not only is it a major stop-over for migratory birds on their long journeys north and south, but it is also an excellent nesting location for birds that remain in the county during the summer months.

One of the very important features of a marsh is its ability to act as a natural purifier for water that has emptied into the marsh from the connective waterway and adjoining tributaries. Here the water is held and filtered by naturally occurring vegetation before it enters the lakes. This creates a vital ecological balance for the waters draining from our lands to the Great Lakes. Another notable value of a marsh is its ability to act as a holding tank for excess water during periods of flooding. This is very important for an area as flat as Essex County.

A marsh can also be a good source of recreation. Hunting is one sport that occurs in the Big Creek marsh area and it has been through the efforts of the hunting clubs that a large portion of the marsh has been left largely in its natural state. Canoeing and fishing are other activities that take place throughout the marsh as well as birdwatching.

Most of the area that is privately owned is relatively undisturbed, the only major disturbance has been the destruction of the limited beach vegetation by cottage development.

We now realize that it is no longer wise to view marshland as wasteland. Marshes are very important ecological balances to both the land and water of any area where they occur. Not only are they vitally important to the wildlife of the area but we have now come to understand the major role they play for the human lives that live around the marsh. Only through awareness, interest and concern will the Big Creek Marsh continue to serve man and animal alike in one of the limited natural areas left in Essex County.

Appendix 2: Example of Stewardship Brochure and Booklet

PROTECTING ONTARIO'S NATURAL HERITAGE THROUGH PRIVATE STEWARDSHIP

3rd Edition
March, 1988

The Natural Heritage League is a network of non-government conservation organizations and government agencies, seeking to promote the public awareness and appreciation of Ontario's natural heritage, its protection and wise management.

The Natural Heritage Stewardship Program is a cooperative project of the League, which contacts landowners of important natural heritage areas. We wish to inform them of their property's importance, encourage their continued good private stewardship and to offer assistance whenever possible.

This booklet is distributed by the Natural Heritage League to encourage owners of significant natural heritage sites in Ontario to protect these features through private stewardship. We seek to describe the significance of our province's natural heritage, to stress the important contribution of private stewardship and to outline various protection options open to interested landowners.

Private stewardship can be one of the most effective ways of protecting Ontario's rich natural legacy for future generations.

Presented To:

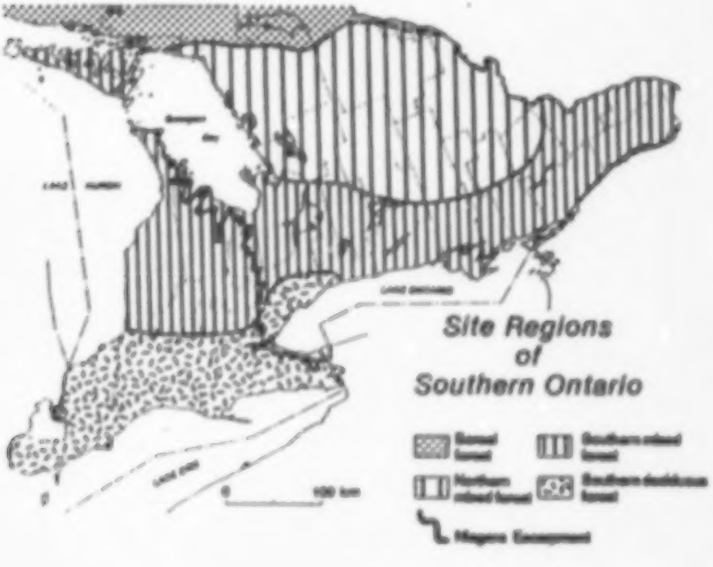
____

by ___________________________

representing the Natural Heritage League

The Natural Heritage of Ontario

The people of Ontario have inherited a rich and diverse natural legacy, extending from the Laurentian mountains in the east to the Prairies in the west, and ranging from sub-arctic tundra in the north to southern deciduous forests. The cold waters of Hudson Bay push northern climatic and vegetation zones further south than anywhere else on the continent. At the other extreme, a very moderate climate near Lake Erie has encouraged the presence of Carolinian species, most of which are found nowhere else in Canada. No other province or state on the continent possesses such a wide range of vegetation types. Scientists have divided the province into a total of 14 'site regions' reflecting this immense ecological diversity. Three of these can be found in southern Ontario.


Site Regions of Southern Ontario
Lake Huron
Georgian Bay
Lake Ontario
Lake Erie
0
100 km
Boreal forest
Southern mixed forest
Northern mixed forest
Southern deciduous forest
Niagara Escarpment

In wetland areas, organic soils serve important hydrological functions. Through their ability to regulate runoff and water storage, they can reduce spring flooding and moderate the lower, upstream water levels in the summer.

In northern Ontario, the vast boreal forests form the foundation of our lumber, pulp and paper industries.

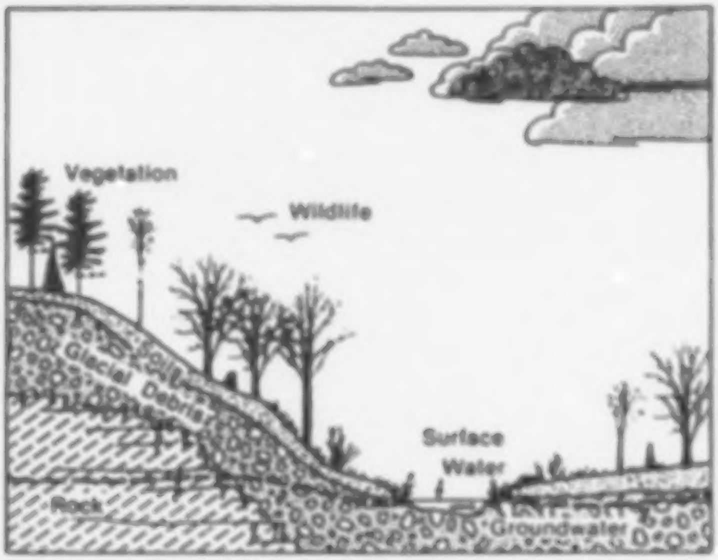
Much of Ontario's geological heritage is the source of rich mineral aggregates important to our future development. Several areas along the Niagara Escarpment, as well as glacial features like moraines and eskers, are rich in gravel and limestone deposits, and have been quarried to varying degrees.

Ontario also benefits increasingly from its natural landscapes as tourist attractions.

The importance of protecting our natural genetic resources, one of the cornerstones of the World Conservation Strategy, cannot be overemphasized. As one great conservationist, Aldo Leopold, wrote, "Who ... would discard seemingly useless parts? To keep every cog and wheel is the first precaution to intelligent tinkering." In other words, if man is going to take apart natural ecosystems and manage or manipulate them for his own benefit, as in modern agriculture, aggregate mining or forestry, then he should at least save all the pieces (plant and animal species) so that he can put the system back together again when necessary.

People should practice a land ethic which will support sustainable production of all products which we may need from the land, now or in the future. Included in this delicate balance is the protection of our natural heritage. Beyond the direct benefits which our natural heritage can provide for people, it deserves some protection for its own sake. Protection of our natural heritage is a statement of our humility and willingness to live as part of nature.

In the southernmost part of the province, settlement and land clearing have been ongoing for the past two hundred years. As a result, some types of our natural heritage have almost disappeared. Southwestern Ontario, for example, is dotted with remnants of once magnificent and widespread hardwood forests.



Components of the natural landscape.

While many small natural areas of vegetation remain, we have now reached the point where the habitats of some species are threatened and very few examples of certain ecological communities of any size remain. Large tracts of upland forest, prairie remnants and shoreline marshes are now becoming very rare in the southwest part of Ontario. The existence of some animal and bird species, requiring large areas of closed forest or undisturbed shoreline to survive, is now threatened.

Ontario also has many unique landform types which tell the story of our geological heritage. In many cases, it is our geologic history together with prevailing climatic conditions that influence the types of plants and animals found in various parts of the province.

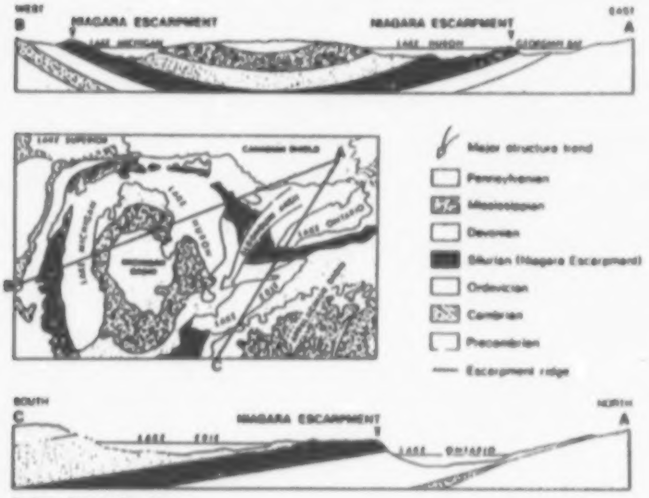
The Canadian shield, for example, rises to the earth's surface in eastern and northern Ontario, and supports a myriad of lakes and forests amidst outcroppings of pink granite. It dips downward under our productive agricultural soils in central and southwestern Ontario, and disappears at great depths into the central United States.

Ancient lakeshores, glacial moraines, large river valley systems and more apparent features like the Niagara Escarpment remind us of the powerful forces of nature, and provide striking scenic vistas to those who venture to see them.

The landscape of the Niagara Escarpment has unique attributes which are unparallelled in Canada. In prehistoric times, an extensive bowl- shaped depression filled with warm sea waters covered much of what is now southwestern Ontario and the State of Michigan. Successive layers of marine sediment formed over time and eventually were compressed to form a variety of limestones, shales and sandstones. The greater elevations of the Escarpment actually form the rim of this bowl. The rim is noticeably higher near Georgian Bay, due to a more recent uplifting from the 'Algonquin Arch'. Over time, the softer sandstones and shales have eroded away, leaving the striking cliffs of the Niagara Escarpment that we now see at various locations from Queenston Heights to Tobermory. Remnants of the

Escarpment are also found on Manitoulin Island, and as far away as the west shores of Lake Michigan.

THE LOCATION AND STRUCTURE OF THE NIAGARA ESCARPMENT


WEST
B
NIAGARA ESCARPMENT
LAKE MICHIGAN
NIAGARA ESCARPMENT
LAKE HURON
GEORGIAN BAY
EAST
A
LAKE SUPERIOR
CANADIAN SHIELD
LAKE MICHIGAN
LAKE HURON
LAKE ONTARIO
LAKE ERIE
C
Major structure trend
Pennsylvanian
Mississippian
Devonian
Silurian (Niagara Escarpment)
Ordovician
Cambrian
Precambrian
Escarpment ridge
SOUTH
C
NIAGARA ESCARPMENT
LAKE ERIE
LAKE ONTARIO
NORTH
A

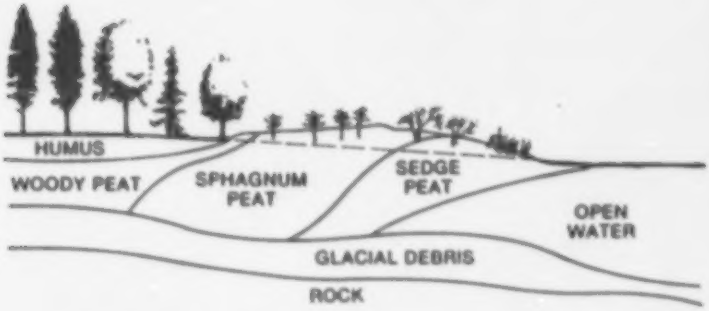
The Niagara Escarpment Commission

In other parts of the province, important groups of rare species are found because of prevailing climatic conditions. One example of this is the southern deciduous forest or 'Carolinian' zone, stretching across southwestern Ontario from Toronto to the lower end of Lake Huron. Trees such as Tulip, Sassafras, Black Gum, Cucumber, and Flowering Dogwood can be found. Plants like Trumpet Creeper,

American Lotus, and animal species such as the Opossum, Karner Blue Butterfly, Fowler's Toad and the Blue Racer survive only here in the warmest part of Canada.

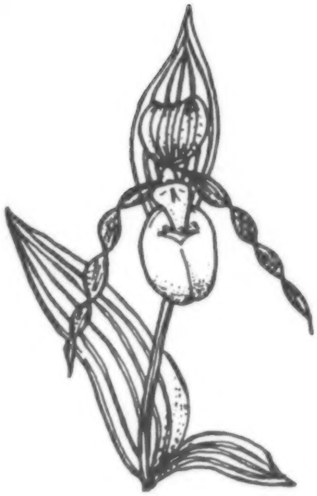
On a more local scale, fascinating relationships are found in the ecology of these remaining natural areas. Forest types and the species they contain generally adapt to the terrain and climatic conditions in which they are found.

Thus, low-lying swamps will be dominated by Black Ash, Cedar or soft maple species. In drier upland areas, tree species like Sugar Maple, Beech, Black Cherry, and Red or White Oak will predominate. These uplands are the areas which, when cleared, provide our best soils for farming. Their soils, which have taken centuries to develop, can be degraded in only a few short years with improper management.



A typical bog in southwestern Ontario

In some hilly parts of Ontario, the effects of glaciers can still be found. Rugged hummocky hills of gravel, formed by glacial moraines, are invaluable for water recharge but are often poor soil for farming. Depressions among the glacial moraines, which were once kettle ponds, often develop into bogs, with mats of Sphagnum mosses and a variety of rare associated species. At least 51 species of orchids can be found in the Bruce Peninsula area.



Where the Carolinian zone meets the Niagara Escarpment, the combination of warm climate, steeper topography and the sheltering effect of the cliffs produce a unique microclimate for vegetation, and increase the diversity of natural habitat even further.

Some special features of the landscape such as sand dunes, cliffs or rock outcrops harbour their own collections of species. Marram Grass is often found holding dunes in place and the tiny rock fern, Maidenhair Spleenwort, struggles to live in microscopic crevices of limestone boulders.

In many ways, the ecology and geology of Ontario's natural heritage is fascinating. Learning to appreciate its diversity and beauty will always enrich our lives.

Why is Natural Heritage Important?

Many reasons have been given for protecting our natural heritage:

- Natural areas are a large part of the overall **aesthetic appeal** of our rural landscape, and provide their owners with opportunities for quiet relaxation.
- Natural areas provide a **habitat** or home for much of our province's wildlife.
- Natural areas provide valuable **hydrological benefits** by regulating water levels, especially in landscapes which are already largely developed.
- Natural areas can provide an ongoing source of **economic products**, such as lumber, which can be as profitable as cash cropping with proper management.
- Natural areas provide **benchmarks for research** and **protect our genetic resources**, needed for future scientific use.

Let's look at some of these in a little more detail.

Ontario's economy depends heavily on our natural heritage in many ways. In the warm, southern parts of the province, rich soils remaining after forests have been cleared became the base for our agricultural production. Lands in agricultural production can benefit from the presence of these forested areas - soil erosion from wind is reduced, moisture availablity can be increased and crops receive some protection from the elements. On the Niagara Peninsula, the combination of warm climate, the protection offered by the Escarpment face itself, and certain soil types have resulted in extensive production of tender fruit crops.

Further Information May Be Available

Often, ecological studies have been conducted on natural areas by Universities, the Ministry of Natural Resources, Conservation Authorities or naturalist clubs. As a first step then, landowners can be provided with any information available from these groups.

Natural Heritage Stewardship Award

The Natural Heritage League has initiated an award program to recognize owners who are and wish to continue protecting the natural features of their property. In order to qualify, landowners of significant sites would have to agree not to disturb the natural area unreasonably, and to give the Natural Heritage League ninety days notice of a proposed sale or major development. This provides the League with an opportunity to suggest an alternative.

More information may be found in the pamphlet "Ontario's Natural Heritage Stewardship Award Program".

Property Tax Reduction

The Government of Ontario is finalizing the details of a property tax reduction program for certain conservation lands. Eligible private landowners will be notified by mail when the program is initiated. It is expected to be retroactive to 1987, and would permit owners to apply for a 100% property tax rebate on property which falls within designated provincially significant natural areas. A signed agreement from the landowner, indicating his intentions to protect the features, will be required.

Management Agreements

A number of specific management agreements are possible. One common tool is the Woodlands Improvement Agreement, in cooperation with the Ministry of Natural Resources. This type of agreement can have positive economic implications for the rural landowner. They can be written to accommodate a variety of landowner needs, such as emphasizing wildlife protection or encouraging the growth of a particular tree species. Conservation Authorities offer assistance with tree planting and stream bank improvement programs. Also, some private conservation organizations, such as Ducks Unlimited, may be able to enter into direct management agreements with landowners to provide advice or management assistance.

Conservation Easements

A conservation easement can be defined as: a legal document which places restrictions, on the use and development of a parcel of land, usually privately owned, in order to conserve its natural features.

Conservation easements by Canadian law, can only be held by government agencies, such as the Ontario Heritage Foundation. Easements are flexible and can be written to include almost any kind of restricted use agreed to by the owner and easement holder. It can require, for example, that the land be left completely in its natural state or it can provide for various activites, such as farming, hunting, or fishing. It can even provide for limited development, such as the construction of dwellings or other facilities which do not compromise the aesthetic or ecological values of the land.

An easement can be applied to an entire property or a portion of it, such as the land along the shore of a lake or stream.

While they are useful in their own right, conservation easements can also be used in combination with the sale or donation of land where the owner wishes to exert some control over future land use. They can affect the property in perpetuity, passing on with the deed from one owner to another.

Leases

In some specific circumstances, a conservation organization or naturalist club might be interested in leasing an area of high natural heritage value. Such tenants ensure wise stewardship and revenues from the lease agreement can offset landowner's costs in maintaining the property.

Sale of Land

Many landowners sooner or later decide to sell their land, except in cases where they plan to leave it to family members. Landowners should be aware that a variety of options are available if they are interested in selling to a conservation organization. These include:

- Outright sale - by far the most common.
- Sale with a Reserved Life Estate - this allows owners to continue to live on the land for the balance of their lives, or for another specified length of time. It may include continuing rights for children as well.
- Restrictive Covenants - sales can be made with restrictive covenants added to the deed which limit future owners' rights to alter the natural heritage features on the land. This would be similar to a sale combined with a conservation easement.

- First Right of Refusal - while an owner may have no interest in selling at present, he may wish to give a specific agency, such as a conservation group, the first chance to buy the property if and when he does decide to sell. Such a right is legally binding, but does not usually specify the price.
- Sale with Saleback or Leaseback - in some cases, parts of properties can be purchased, then resold or leased back to the original owner in order to complete a mutually beneficial transaction. In other cases, properties may be purchased, have restrictive covenants placed on the title by a public agency, then resold on the open market.
- Installment Sale - involves payments spread over a specified period of time.

These and other options can make the process of selling land somewhat more flexible for owners wishing to ensure the protection of natural heritage values on their property. It should be recognized, however, that many conservation organizations do not have funds readily available for property acquisition. Usually, once a decision has been made to purchase a property, a fundraising campaign will begin. There will often be a time lag between the decision and the actual purchase.

Donation of Land

Donations of property to non-profit conservation organizations or agencies of the crown such as the Ontario Heritage Foundation, will ensure long-term protection of important natural features, and can also result in favourable tax benefits to the donor.

- Outright Donation - this is the most common procedure. Most donors of land will make an agreement with an organization to which they donate specifying to some extent the use to which the land may be put. This is more effective if the donation occurs while the donor is still living rather than through a will, since it allows for some negotiation.
- Donation with Reserved Life Estate - this variation is similar in nature to reserved life estates with land sales noted previously.
- Donation by Devise - this is a donation through a will, becoming effective only upon the death of the donor. As mentioned earlier, it is usually better for the donor if such a gift can be at least negotiated in advance so that all involved are clear as to the donor's intentions and wishes.
- Donation with Restrictive Covenants - as in the case of sales, donations of land can be made with restrictive covenants attached or in combination with conservation easements.
- Conditional Donations - donors of land can specify, in most cases, conditions to be met if the donation is to become effective.

Part Donation - Part Sale

This option involves a combination of a sale and donation of land. It is a sale of land at below the appraised market value, with difference between the selling price and the appraised value being considered as a donation if the owner is selling to a charitable conservation agency or an agency of the crown.

Tax Implications

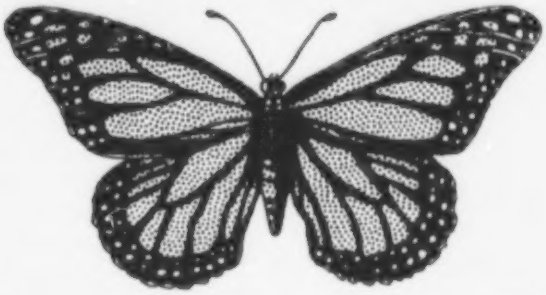
Most of the options for property donations have favourable tax implications for landowners, depending on one's financial position.

Options among the above, in which the owner retains legal possession of the land (such as easements or management agreements) in no way imply that property will be accessible to the general public. The right to access is a decision which remains entirely up to the landowner in all cases.

In summary, then, we wish to encourage the private stewardship of all types of land resources, be they agricultural soils, managed forests , aggregate resources, recreational areas or important natural areas. Protecting natural areas can be accomplished through a landowner's own initiative in maintaining a site and seeking advice or assistance, when necessary, in managing his property. A number of beneficial options are available to interested owners.

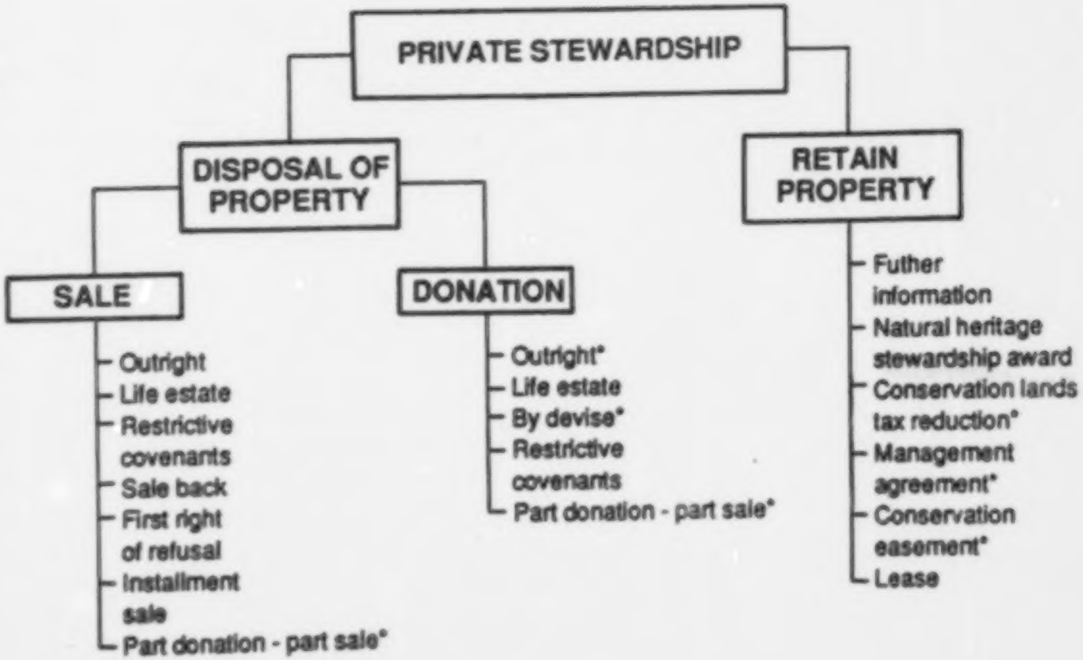
What Can the Landowner Do?

Much of our remaining natural heritage is found on private land, and one of the best means of protecting it for future generations to appreciate will always be through good private stewardship. This often simply means leaving the areas alone or maintaining a sensible level of use for forest production, recreation or personal enjoyment. Protection of our natural heritage usually involves little or no cost at all and learning about the natural features often enhances a landowner's appreciation of his or her own property.



The Natural Heritage League sincerely hopes that all landowners will be good stewards of their land resources, whether they be agricultural soils, recreational areas, or natural heritage.

Landowners who wish to learn more about the natural features on their property and how to manage them have a variety of options open to them. The following chart briefly outlines some of these:


PRIVATE STEWARDSHIP
DISPOSAL OF PROPERTY
RETAIN PROPERTY
SALE
DONATION
Outright
Life estate
Restrictive covenants
Sale back
First right of refusal
Installment sale
Part donation - part sale*
Outright*
Life estate
By devise*
Restrictive covenants
Part donation - part sale*
Futher information
Natural heritage stewardship award
Conservation lands tax reduction*
Management agreement*
Conservation easement*
Lease

* *Options which may have favourable tax implications*

For Further Information,

Ask your Landowner Contact Representative, or contact:
The Natural Heritage Stewardship Program
Department of Land Resource Science
University of Guelph
Guelph, Ontario
N1G 2W1 519-824-4120, extension 8329

or The Ontario Heritage Foundation
77 Bloor Street West
Toronto, Ontario
M7A 2R9

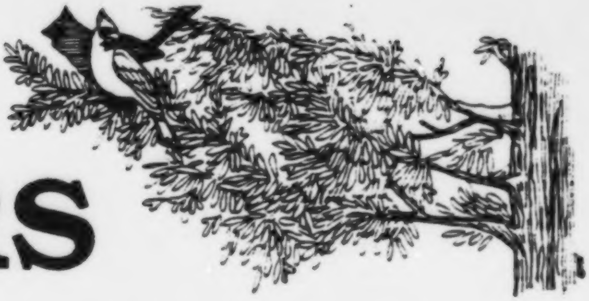
Niagara Escarpment Coordinator	Natural Heritage Coordinator
416-965-8859	416-965-8199

This booklet was prepared for the Natural Heritage League by Stewart Hilts and Tom Moull through the facilities of the Department of Land Resource Science. Funding for the Natural Heritage Stewardship Program has been provided by research grants to the University of Guelph from the Ontario Heritage Foundation's Natural Heritage and Niagara Escarpment Trust Funds. We also wish to acknowledge the ongoing support of the following:

Canadian National Sportmen's Shows
The Laidlaw Foundation
The McLean Foundation
Ministry of Natural Resources
The Nature Conservancy of Canada
Wildlife Habitat Canada
World Wildlife Fund

Appendix 3: Example of a Landowner Newsletter

LAND MATTERS



The Newsletter for Private Owners of Ontario's Natural Heritage
ISSN 0847-5067 Vol. 2. No.1 Winter 1990

Good stewardship matters to our land

Welcome to **Land Matters**, the newsletter that aims to encourage good private stewardship of our natural heritage. Land Matters is the title chosen for the newsletter, from among the many suggestions made by readers of the first issue. It is an appropriate name, for it captures our central theme - our land really does matter.

Stewardship is simply taking good care of something. It comes from the Old English words *stig* and *weard*, referring to the warden or the one who cares for the house. Today we apply the term to the land, including our natural heritage, and talk of private land stewardship meaning simply taking good care of the land while we use it.

The term **stewardship** tends to imply two things. First, it suggests a concern for the future, specifically for future generations. As an Ontario farmer said to one of our landowner contact representatives three years ago, "If I can't pass this land on to my children in better shape than it was when I bought it, then I have done something wrong."

Secondly, the idea of land stewardship is at least partly a moral or ethical responsibility. It extends our ethical obligations beyond the human community to include the rest of the species on earth, and the land on which we all live. As Aldo Leopold wrote in his classic article, the Land Ethic, accepting the responsibility of land stewardship, "changes the role of *Homo sapiens* (human beings) from conqueror of the land-community to plain member and citizen of it."

In a sense, we have not inherited our land from our parents, nor have we merely purchased it. We are borrowing it from our children and their children and should leave it undamaged for their future use. This does not mean absolute preservation, nor does it allow for unbridled exploitation. Rather it is the middle road of responsible and careful use.

This newsletter is dedicated to spreading the idea of good private stewardship, especially of our natural heritage. It also wants to hear from you. If you have a story to share about your land, or you would be willing to have someone else write a story about your own property, drop us a line or give us a call. Together we can help others understand that **land matters**.

Stewart Hilts

Stewart Hilts is a Professor at the University of Guelph and Director of the Natural Heritage Stewardship Program

Contest a success! Congratulations!

LAND
Matters

Barbara McIntosh of Toronto suggested Land Matters as the name for this newsletter. Barbara will be receiving a field identification guide to wildflowers. Honourable Mentions include:

Donna Fochuk, Puslinch - *Your Land*
Ross & Jeanette McAndrew, Puslinch - *Our Natural Heritage*
Wray & Marilyn Cline, Cambridge - *Natural Heritage Focus*
Kay & Larry McKeever, Vineland Station - *The Ontario Conserver*
Marge Lucas, Puslinch - *Heritage Herald*

Congratulations to the over 60 people who sent us suggestions from across southern Ontario. You have shown us how truly interested you are!

The Legacy of Abino Woods

Each time I've had the pleasure of visiting the Marcys I have learned something new. Dr. George Marcy is an excellent example of what a good steward could be. This is a very short story about the Marcy Farm, "Abino Woods" on the shore of Lake Erie, near Fort Erie. It is a story highlighting some of the things Dr. & Mrs. Marcy do as stewards of land in the Carolinian Canada site at Point Abino.

Dr. Marcy's ancestors first came to North America and settled in Quebec in 1600. His mother's great grandfather was a "coureur du bois". Their last name was Druillard.

In 1812 Dr. Marcy's great grandfather was involved in the battle which resulted in the burning of Buffalo. After this battle, Druillard decided to stay in Buffalo and changed his name to Drullard.

In 1904, one of Dr. Marcy's grandfathers, George B. Hayes, bought a sizeable portion of Point Abino and built a home. Dr. Marcy spent quite some time at Point Abino as a child and in 1928 decided to purchase some property and a cabin on the Point off Holloway Bay Road.

One day in 1962 Dr. Marcy was approached by a developer who was interested in purchasing some property to the north of him. The developer wanted access to the beach by way of Dr. Marcy's property. Because of his love for the area and his concern for what could happen if the area was not carefully developed, Marcy arranged for a down payment on the farm that day.

The shore of Point Abino

Since that time the Marcys have become very well known in the area. They call the farm "Abino Woods", which is almost 300 acres in area. To the many acquaintances they have made over the years, their home is always welcome.

Although he is not a farmer himself, Dr. Marcy has tried to keep the farm in working condition with the help of neighbours. There are old orchards and he has kept some cattle as well as honey-bees. He tries to keep beach erosion in check by planting fast growing poplars.

The Marcys keep a guest book and a scrapbook of photographs. The photos include people who visit as well as nature photos and the names of the things they have identified. For example there are some very tall Tulip trees on his property as well as Hognose snakes and Fowler's toads.

Members of the Audubon Society from Buffalo visit the property each spring to watch birds. The Marcys also receive periodic visits from of the Museum of Science in Buffalo, to study and observe moths and beetles.

Private schools and kindergarten classes from inner-city schools in Buffalo visit the Marcy Farm as part of science classes. This is often the only chance that some children get to leave the city and see nature. As part of the childrens' visits Dr. Marcy shows them how he plants trees.

The Marcys have been aware that their property is of natural heritage significance for a long time. They have even unofficially designated it a wildlife refuge by posting their own signs around the property. Dr. Marcy knows it is very difficult to keep track of people who may trespass on his property. The signs are just one way of telling people that he cares and respects nature and hopes they would also, especially while they are on his property. When he comes across an unfamiliar face on his property he simply reminds them that the land is his and requests that as his "guests" they respect the land and environment.

Dr. Marcy is always interested in learning about more ways he could enhance the natural features on his property. His interests are as dynamic and diverse as the wildlife and plant communities found at Point Abino. Perhaps that is why he is the successful steward of "Abino Woods".

Jo-Anne Rzadki
Natural Heritage Stewardship Program
University of Guelph

REMEMBER!!! We'd like to hear from you. Do you know a good steward you could write about? Perhaps even yourself and your own experiences? Do you have any questions? Please send them to us c/o the address on the last page. We'd like to hear from people of all ages - Children too!

Habitat Matters: The Community Wildlife Involvement Program

Stewards of our natural heritage are invariably stewards of wildlife habitat too. Bluebirds grace the fields of farms with nest boxes. Snakes patrol for rodents where there is sufficient cover. Flying squirrels glide through woodlots where dead trees with cavities are left intact as nesting sites.

By linking habitat concerns with land management, landowners maintain healthy and diverse ecosystems. The Ministry of Natural Resources (MNR) applauds the habitat conservation practices of private landowners, and offers support for such initiatives through the Community Wildlife Involvement Program (CWIP). CWIP is a network of MNR staff and volunteers working as partners in wildlife management.

Through CWIP, private landowners are working with families, neighbours, clubs and community groups to undertake habitat enhancement, restoration and management projects. The Ministry provides technical expertise and up to $3,000.00 in funding support for equipment and materials needed to get the job done. The following is just one example of a Program participant.

Willem vander Mark is a rural landowner in the Village of Grassie, Ontario, which is just south of Grimsby. He has tackled two successful CWIP projects. His 10 hectare (25 acre) property borders on a woodlot and contains a low marshy area, old fields, low grass and a pond. He first became involved in CWIP in 1988 and with the help naturalists, scouts, students from the College Street Public School in Smithville, and even a member of the Ontario Bluebird Society, they enhanced his diverse property for wildlife. The volunteers planted trees and shrubs to make hedgerows, developed a forage plot for deer, and built nesting structures for waterfowl and cavity-nesting birds.

Willem has made a commitment to wildlife conservation by incorporating his interests into a habitat plan for his property. In it he outlines his goals for habitat improvements and maps out his ideas for future work. He employs techniques through CWIP and on his own.

MNR

MNR Wildlife staff can help you develop a habitat plan for your land

"I look at CWIP as an excellent program," says Willem. "If you are a landowner and really interested in helping wildlife, this program is for you." Willem says to expect some paperwork and planning, but also predicts you will see tangible results from your work. Bluebirds have already raised families in his nest boxes, and several bluebirds remained on the property late into the fall to feed on the shrubs planted through CWIP. He has also noted an increase in the number of a variety of wildlife species on his property.

One of the easiest things a landowner can do to attract wildlife, Willem says, is to leave or erect a dead tree on the land. "Everybody cuts down dead trees," he laments. "By putting them back up again you attract all kinds of birds." Woodpeckers feed on the bugs, while hawks and owls use them as a perch for hunting. Other birds passing by can drop down for a rest or to scan the surroundings. Erecting a wildlife roost tree, like many simple conservation techniques, requires a little know-how but no financial support. You can learn about projects like this by talking with MNR staff, or looking through their CWIP Manual.

Local MNR staff from the District Office in Fonthill provided Willem with guidance on habitat enhancement techniques, and funding for the plants and building materials. They also helped him make connections with community groups. By enlisting the participation of other individuals and groups Willem has helped many others get involved in wildlife conservation. Private landowners preparing work on their properties must develop a multiyear habitat plan prior to project approval, and must also link up with community volunteers.

Birds, mammals, other fauna and many types of flora are both products and beneficiaries of a healthy rural landscape. You can help maintain these wildlife populations through the Community Wildlife Involvement Program. To find out how to get involved in CWIP, contact your local district office of the Ministry of Natural Resources.

Mark Stabb

Mark Stabb is a Biologist with the Wildlife Branch, Ontario Ministry of Natural Resources.

For a free information package on habitat plans and habitat improvement techniques for private landowners, write to Mark Stabb in the Wildlife Branch of the Ministry of Natural Resources, Room 4620, Whitney Block, Queen's Park, Toronto, Ontario M7A 1W3.

4 NATURE NOTES

Ancient forest discovered along Niagara Escarpment

Niagara Escarpment cliff faces support the oldest and least disturbed forest in eastern North America. Some of you may have heard about the discovery in 1988 of cedar trees up to 723 years in age by Botany Prof. Doug Larson of the University of Guelph. These trees, located near Milton, were around more than 200 years before the first European settlers landed on Canadian shores.

"It is probably the last piece of undisturbed habitat in Ontario," Larson said, "and it's in the middle of five or six million people." The cliff forest probably survived logging, fire, settlement and paving because it is inaccessible.

In 1989, he studied at least 16 more cliff face sites along the escarpment from Grimsby in the south to Bears Rump Island in the north. This involved taking core samples of cedars in order to count growth rings. The bulk of trees sampled at each site ranged in age from 80 to 250 years but trees of over 500 to 600 years were also found. What is most interesting is that trees over 500 years old can be no more than 1 to 2 metres in height. Some of these trees are located along well travelled hiking trails and conservation areas. But they had been totally overlooked until the 1988 discovery because of their stunted growth.

Eastern white cedar (its scientific name is *Thuja occidentalis*) is one of the most common trees in Ontario. These trees grow in a range of conditions from wet swampy areas or on bare rocks on cliff edges and are used by many of us as hedges in our backyards. "Cedars have the ability to root anywhere along the trunk or branches and actually seem to be able to stop growing in times of stress to maintain the life of the root system", says Larson. Although they can survive in a range of conditions, they do not do as well when there is competition from other species.

The presence of other species like ferns, and organic matter, that promotes the growth of young trees and seedlings is important in maintaining the ancient forest. Studies conducted on both private and public lands reveal that undergrowth in the undisturbed areas is 10 times more dense than along hiking trails. The forest system can be adversely affected in areas where hiking and climbing activity is channelled near cliff- edges. It loses its ability to be self-sustaining.

Larson believes this forest is of value for a number of reasons. It is of educational value in that can be used to teach citizens what an old growth forest really looks like and in time can show them how forests work generally. Larson believes that public access to natural areas is critical to their protection. "People need to experience the natural world to learn to appreciate it." This can be done through specially guided hikes and ensuring that people stay on marked trails.

H. Rauscher, U. of Guelph

Prof. Doug Larson and 723 year old white cedar on the Escarpment cliff-edge near Milton

This forest is of cultural value also. "Our oldest cultural institutions have been present for 200 years at most." says Larson, "What we have had access to has been a tremendous heritage in natural landscapes and resources". Places like the cliff edge forest becomes that much more important as other areas become depleted or contaminated.

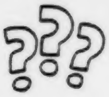
This forest has scientific value because many parts of it are a good example of an undisturbed ecosystem. It has few species compared to forests in other areas and latitudes like the tropics, so it can be easier for scientists to study the natural processes controlling forest systems in general. Also, the tree rings can be used to determine what type of climatic change has occurred in the central part of North America for the past 1000 or more years.

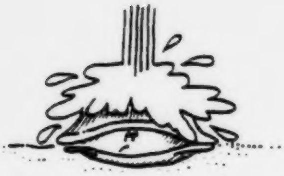
The most important lesson we can learn from this discovery is the value of our good stewardship. Landowners along the escarpment have an important role to play in the conservation of this ancient forest. Who would have guessed that those small and common cedars were of any value or significance? Perhaps your woodlot holds an undiscovered key to understanding nature.

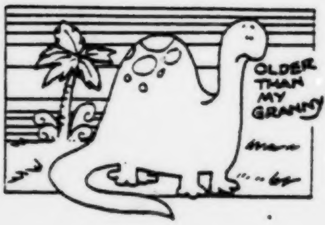
Jo-Anne Rzadki

Additional credit to At Guelph Vol 32., No 26, Sept. 7, 1988.

A Bit about Fossils






OLDER THAN MY GRANNY!

What's a Fossil?
A fossil can be any evidence of an animal or plant found in the earth.

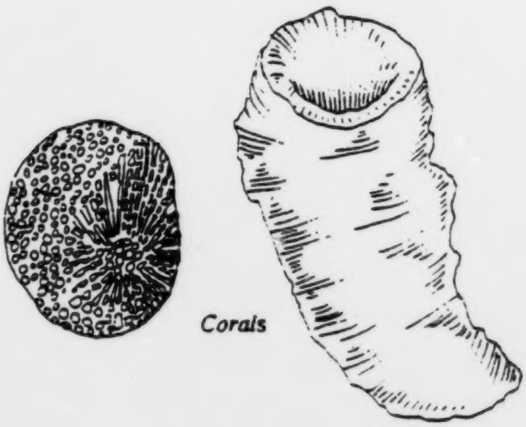
How were fossils made?
Fossils were made when the animal or plant was quickly buried in a protective coating (like mud, lava or clay).

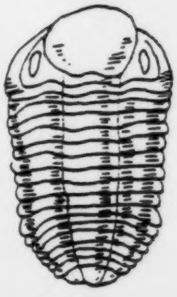
What are fossils made of?
When the plant or animal is buried, the shell, skeleton or other hard parts remain. Prints of fossils are made when carbon is left after the flesh or soft parts disintegrate. These fossils look like they were printed on shale or mudstone.

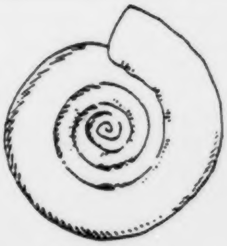
How old are fossils?
Many of the fossils you can find in Ontario are over 350 million years old... long before the time of the dinosaurs.

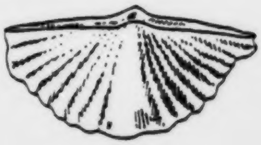
Where to look for fossils in Southern Ontario:
- abandoned rock quarries
- around the Bruce peninsula
- the Niagara Escarpment
- any area where there is fresh exposed rock.

Common kinds of fossils


Corals


Trilobite


Cephalopod


Brachiopod

by Steve Sadura, geology technician and Debbie Thompson Wilson, cartography and graphics. Department of Land Resource Science, University of Guelph

Working with landowners: The Natural Heritage Stewardship Program

Since this is the first issue of Land Matters, I thought it would be an opportune time to bring you up-to-date on the field activities of the Natural Heritage Stewardship Program (NHSP) over the past few years. The majority of our readers own properties within Carolinian Canada, or along the Niagara Escarpment, and will be at least a little familiar with these areas.

The NHSP is a research and extension project sponsored by member organizations of the Natural Heritage League, a cooperative group of 28 government and non-government groups. All of these groups have an interest in the identification and protection of Ontario's best remaining natural heritage areas.

The League was established in 1982, one of it's goals being to find cooperative and innovative ways of protecting these areas. For example, working with individual private landowners to provide them with information on protecting areas through private stewardship.

The NHSP began in 1984, when it was introduced, as the Natural Heritage League's Landowner Contact Project, to 150 landowners across southern Ontario. There was overwhelming interest by landowners in private stewardship. They liked the personal approach to learning about the special features on their properties. It was appreciated that both government agencies and non-government organizations were getting together in an honest attempt to coordinate their projects.

The Landowner Contact Project joined with the Carolinian Canada project in 1985. This was initiated by the Nature Conservancy of Canada and World Wildlife Fund. They invited other Natural Heritage League members to participate, and a total of 38 key areas were identified, mostly in the private ownership of over 1,000 landowners. As well as the original two founding organizations, the Carolinian Canada project was joined by the Ministry of Natural Resources, Wildlife Habitat Canada, the Ontario Heritage Foundation and local Conservation Authorities.

By 1987, the NHSP and the Natural Heritage League had developed the Natural Heritage Stewardship Award Program. It is a voluntary 'handshake' private stewardship agreement for landowners.

As of this past summer, over 470 landowners in Carolinian Canada have made this agreement to protect the natural features on their property. These people collectively own over 13,400 acres of Carolinian Canada sites. Also in 1989, some local offices of the Ministry of Natural Resources and Conservation Authorities began contacting owners as one way in which the League could decentralize the program and contact more landowners than we would be able to from the University of Guelph.

Over the last two years we've also been contacting landowners along the Niagara Escarpment on behalf of the Ontario Heritage Foundation. As a result, there are now 140 landowners of 2,700 important natural heritage acres along the Escarpment participating in the Natural Heritage Stewardship Award Program.

Apart from developing the landowner contact and Stewardship Award Programs, the NHSP has also researched the use of other private stewardship enhancement techniques for protecting Ontario's natural heritage. These include written agreements such as natural area management agreements and conservation easements. Many of you are participating in the Conservation Lands Tax Reduction Program, which is a form of a written stewardship enhancement agreement. We are also working to develop other cooperative stewardship projects with different dividuals and organizations across the province.

Something we hope will be of immediate benefit to you is this Newsletter. Developed over the past year on behalf of the Natural Heritage League, it is intended to provide an opportunity for private landowners to learn more about private stewardship - what it means, what other owners are doing, and so on. One main reason that we have been able to continue the newsletter was because of the many positive responses we received to the mail-back questionnaire included with the first issue last winter. We are also interested in your questions, and receiving other interesting articles which we could include in future issues. Remember, this is your newsletter.

Tom Moull

Tom Moull is a Research Associate at the University of Guelph, and Coordinator of the Natural Heritage Stewardship Program.

QUESTIONS AND ANSWERS

1. I'm not quite clear on why I'm receiving a plaque. What did I do to deserve one?

The best answer to this question is probably a quick review of the terms of the Natural Heritage Stewardship Award agreement. It's not a plaque for what you've done in the past, although in some cases this is important too. The award is intended to recognize what you will be doing in the future, under the terms of the agreement.

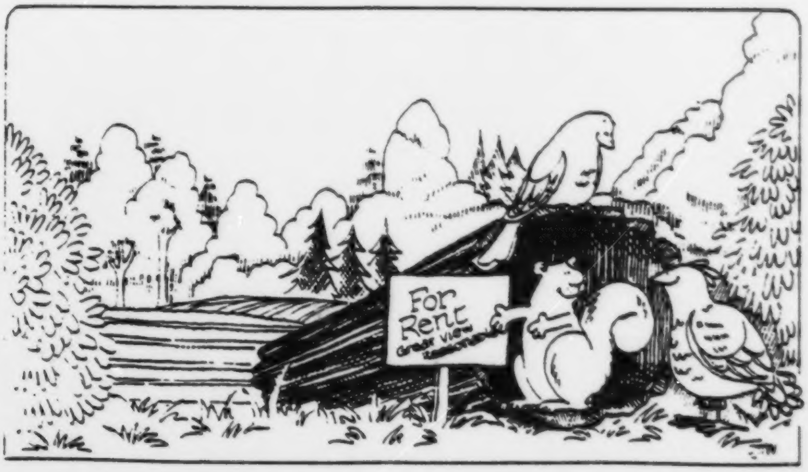
The Natural Heritage Stewardship Award program is based on a verbal 'handshake' stewardship agreement between yourself and the Natural Heritage Heritage League. We believe more and more private landowners are beginning to realize that protection of the environment often has to start right at home. What we are trying to do with the Award program is to provide participants with enough information on the natural features that they can make informed land use decisions for their own properties. We also try to answer any questions which may arise, and to link landowners with available natural area management programs offered by various (usually government) organizations.

Owners participating in the Award Program make a commitment to:

Natural Heritage League
Natural Heritage
Stewardship
Award

a) maintain and protect the natural features on their property to the best of their ability,
and to notify the Natural Heritage League or its designate of:
b) major land use changes which might threaten the natural heritage features,
c) other threats to the area, such as intensive lumbering or drainage, and
d) intent to sell or transfer ownership of the property.

This plaque is given in recognition of your promise of future good stewardship.



2. What should I do if I made a stewardship agreement and I'm thinking of selling my property?

If you are involved in the Stewardship Award Program, we would like to hear from you. Your notification will remind us we should visit with the new owner once the property has changed hands. This is so that we can give that owner the same information about natural heritage and private stewardship we gave you.

Also, while it's not the rule, occasionally a conservation group may be interested in purchasing your property. Being notified of your interest in selling at least provides an opportunity for the Natural Heritage League (usually through one of its member organizations) an opportunity to consider this option.

3. We have a lot of different kinds of wildlife in our bush, but we would like to remove some trees for firewood. How do I know which ones to take, because I would also like to maintain the bush for wildlife habitat?

You are quite correct in suggesting that removing trees can affect a woodlot's ability to support different kinds of wildlife.

As a general rule you can start by removing SOME of the dead trees. Especially those that may be a hazard to buildings or humans. Reasons for not removing all of the them is explained to some extent in the CWIP article on Page 3.

Similarly, it can be acceptable to cut a few live trees but we would like to suggest that you contact professional foresters and biologists, for example those at local Ministry of Natural Resources Offices or Conservation Authorities. They can give you advice on how to remove trees without causing irreversible changes to the quality of your woodlot.

LAND MATTERS (ISSN 0847-5067) is the newsletter of Ontario's Natural Heritage League for private owners of Ontario's natural heritage. It is published on behalf of the Natural Heritage League by the Natural Heritage Stewardship Program at the University of Guelph.

Funding for this issue provided by:
CAROLINIAN CANADA LAND PROTECTION AND STEWARDSHIP PROGRAM
ONTARIO HERITAGE FOUNDATION, NIAGARA ESCARPMENT PROGRAM
ONTARIO MINISTRY OF NATURAL RESOURCES WETLANDS PROGRAM

The Natural Heritage League is indebted to the following who have provided support for the Natural Heritage Stewardship Program:
CANADIAN NATIONAL SPORTSMEN'S SHOWS
LAIDLAW FOUNDATION
McLEAN FOUNDATION
MEMBERS OF THE ASSOCIATION OF CONSERVATION AUTHORITIES OF ONTARIO
NATURE CONSERVANCY OF CANADA
NIAGARA ESCARPMENT COMMISSION
ONTARIO HERITAGE FOUNDATION
ONTARIO MINISTRY OF NATURAL RESOURCES
PRIVATE DONORS
UNIVERSITY OF GUELPH
WILDLIFE HABITAT CANADA
WORLD WILDLIFE FUND, CANADA

Articles are welcome. Please contact:
JO-ANNE RZADKI, Editor, Layout
Natural Heritage Stewardship Program
Land Resource Science
University of Guelph
Guelph, Ontario
N1G 2W1
519-824-4120 Ext: 8329

D. THOMPSON WILSON, Graphics
Land Resource Science

© NHSP, 1990

Books to read

LEGACY: THE NATURAL HISTORY OF ONTARIO is a majestic and new book produced this past fall by a large team of conservation writers headed by Professor John Theberge of the University of Waterloo. Well illustrated, the book is a detailed introduction to the natural heritage of the province, with plenty of technical detail and a large number of short readable essays. For anyone interested in learning more about the natural heritage of Ontario, this book will provide hours of interesting reading. It is sponsored by the Ontario Heritage Foundation and Federation of Ontario Naturalists and published by McClelland and Stewart.

ENDANGERED SPACES: THE FUTURE FOR CANADA'S WILDERNESS is a new book produced by World Wildlife Fund, Canada and edited by its president, Monte Hummel. This is much more than a book, for it is the beginning of a campaign to complete Canada's National Park System. The book itself is a collection of essays on this topic, and well illustrated. It lays out clearly the need for action over the next decade if Canada is to meet the Brundtland Commission's target of protecting 12% of our country in wilderness. Anyone interested in suporting the national parks of Canada will enjoy reading this book.

Upcoming events

Ontario Heritage Week: February 20th to 27th, 1990

Trees and Shrubs: Native vs. Imported:
March 6th, 1990, 7:00 pm

Should I plant a Norway Maple or a native Red Oak? This session will consider some alternatives to the use of traditional, imported plants in your garden. An indoor session given by Steven Aboud at the University of Guelph Arboretum Centre. For more information contact the Arboretum Centre at 519-824-4120 Ext: 3932.

Ministry of
Natural
Resources
Ontario

Appendix 4: The Conservation Lands Tax Reduction Program

FACT SHEET

October 1988

THE CONSERVATION LAND TAX REDUCTION PROGRAM

What is the Conservation Land Act?

The Conservation Land Act provides the legislative framework for the Conservation Land Tax Reduction Program.

The Act also delivers Premier David Peterson's commitment "to ease the property tax burden that threatens the preservation of land that is vital to Ontario's natural heritage."

The Act accomplishes two key things:

- o It enables the Minister of Natural Resources to establish programs to recognize, encourage and support stewardship of conservation land; and
- o it provides for the payment of grants to the owners of identified conservation land.

What is the Conservation Land Tax Reduction Program?

The Conservation Land Tax Reduction Program allows a tax rebate of up to 100 per cent on taxes paid since January 1, 1987 to owners of identified conservation land. The aim of the program is to provide a tax incentive that will recognize, encourage and support private landowners who practise good stewardship by maintaining in a natural state lands that contribute to provincial conservation and natural heritage objectives.

Some 372,000 hectares of land, mostly in southern Ontario, have been identified as conservation land through an extensive mapping program conducted by the Ministry of Natural Resources, in conjunction with the Niagara Escarpment Commission.

Owners of eligible land will be notified in November 1988 and will be mailed a brochure on the program and an application form.

.../2

Landowners must apply for the tax rebate.

Tax rebates are already a part of the Ontario property tax scene and apply in two situations: to managed forest lands under the Managed Forest Tax Reduction Program, and to agricultural lands under the Farm Tax Reduction Program. This new program will work in much the same way as the existing programs.

Which lands qualify?

Lands that contribute to provincial conservation and natural heritage objectives include:

- Class 1, 2 and 3 wetlands;
- provincially significant Areas of Natural and Scientific Interest (ANSIs);
- areas within the Niagara Escarpment Planning Area;
- non-revenue producing Conservation Authority lands; and
- other conservation land owned by non-profit organizations that contribute through their management to provincial conservation and natural heritage objectives but do not fit specifically into one of the above categories.

What is a Class 1, 2 or 3 wetland?

Class 1, 2 and 3 wetlands are those wetlands which have biological, social, hydrological or special features of sufficient value to be considered provincially or regionally significant.

The scoring system is described in detail in an evaluation manual developed and published by the Ministry of Natural Resources and Environment Canada (Canadian Wildlife Service). This manual, "An Evaluation System for Ontario Wetlands", is the best source of information for anyone wishing to know more about the many combinations of factors in wetlands which make up the scoring points for each wetland value.

Provincially significant wetlands (Classes 1 and 2) score 650 or more points in Ontario's evaluation system, or rank high in 2 of the 4 wetland values.

Regionally significant wetlands (Class 3) may score 600 or more points or score high in 1 out of 4 wetland values.

.../3

Landowners are eligible to receive rebates under more than one program for different pieces of land.

Lands that receive a pensioner's grant may also qualify for a partial rebate in cases where the taxes exceed the pensioner's grant. In this instance, the difference between the pensioner's grant and the taxes paid may be eligible.

Other conditions that make a landowner ineligible for a rebate may include changes in the use of the lands.

Some conditions for eligibility in the program

The minimum land area eligible for a rebate is 0.2 hectares (one-half acre).

The minimum rebate is $20, even if actual taxes paid are less than that amount. The maximum rebate is $25,000 per property owner, excluding Conservation Authorities.

Rebates will not be paid for taxes assessed on houses, cottages or other buildings located on conservation land, or for taxes on an appropriate amount of land on which those structures are situated (an appropriate amount of land to support a structure is considered to be 0.4 hectares or one acre).

To qualify for a rebate for 1987 and 1988, applications must be received before December 31, 1990.

The Conservation Land Tax Reduction Program applies from January 1, 1987 and provides a 100-per-cent tax rebate on identified conservation land (up to the identified maximum).

Rebates are paid subject to the condition that owners who cease to maintain the land as conservation land must repay an amount equal to the total rebates received by all owners of the land during the previous 10 years, plus interest of 10 per cent a year, calculated yearly.

Authorized personnel from the Ministry of Municipal Affairs must be allowed access to property and appropriate records in order to verify the information set out in the landowner's application for the rebate. This includes information regarding property tax grants for pensioners.

Personnel from the Ministry of Natural Resources may also require access to the property in order to determine the nature and quality of the conservation land.

Public access to property is not a requirement to receive a grant.

.../5

Nearly all provincially and regionally significant wetlands score high under special features values and are important in providing habitat for many species of plants and animals, and for endangered or threatened species. Similarly, for most provincially and regionally significant wetlands, social benefits, including recreational or natural economic opportunities or value, are often high.

What is a provincially significant Area of Natural or Scientific Interest?

Areas of Natural and Scientific Interest (ANSIs) include lands and waters that contain fine examples of Ontario's natural ecosystems and geological features.

The most significant areas are determined through systematic studies that identify and comparatively evaluate candidate areas that represent the elements of Ontario's ecological and geological diversity.

Provincially significant Areas of Natural and Scientific Interest, therefore, provide representation of the variety of the natural ecosystems and geological features of the province.

Most provincially significant Areas of Natural and Scientific Interest have been identified in the ministry's District Land Use Guidelines.

What is meant by "natural areas on the Niagara Escarpment"?

"Natural areas" refers to areas which are designated as "Escarpment Natural Area" in the Niagara Escarpment Plan.

How many wetlands and ANSIs are there in the province?

Approximately 700 Class 1, 2 and 3 wetlands have been identified as potentially eligible for rebates under the Conservation Land Tax Reduction Program.

Approximately 500 provincially significant ANSIs have also been identified on private land.

Which lands do not qualify?

Conservation lands that already receive tax rebates under the Managed Forest Tax Reduction Program and/or the Farm Tax Reduction Program are not eligible for additional rebates.

It is estimated that more than 40 per cent of the 372,000 hectares of conservation land may already receive tax rebates from these two existing tax reduction programs.

.../4

Rationale for the program

Conservation and heritage resource management objectives, and the public benefits Ontarians derive from them, often depend on stewardship of private lands -- particularly in southern Ontario. The Conservation Land Tax Reduction Program enables the province to provide certain tax incentives to private landowners to encourage stewardship of conservation land.

Prior to the program, tax rebates were offered only for agricultural and managed forest lands. "Conservation" land was not recognized as such by Ontario's property assessment/taxation system. As a result, these lands were assessed and taxed according to ownership rather than actual use.

For example, conservation land owned by a farmer was assessed as agricultural land. Meanwhile, conservation land owned by non-farmers was assessed and taxed at a higher residential rate.

The trend toward market value assessment has increased the feeling that this situation is inequitable.

This may have discouraged private landowners from practising stewardship that preserves conservation land. In some cases, landowners have felt pressed to develop or convert their conservation land to a higher value economic use.

By receiving a tax rebate for conservation land, landowners will have an incentive to become stewards of conservation land.

As a landowner, how do I find out if my land qualifies for a rebate?

Subsidies Branch of the Ministry of Municipal Affairs will contact the owners of all identified conservation land by mail and will invite them to apply for the program.

This contact by Municipal Affairs will occur in November 1988.

Landowners do not automatically receive a tax rebate under the program. They must apply for the rebate.

If a landowner has not been contacted by the end of November, and feels qualified for a rebate, he or she may contact the local district office of the Ministry of Natural Resources for information on what actions to take.

Inquiries on the processing of applications and tax rebates may be directed to the Subsidies Branch, Ministry of Municipal Affairs, 777 Bay Street, 12th Floor, Toronto, Ontario, M5G 2E5, telephone (416) 585-7546.

.../6

The deadline for applications for a rebate on 1987 and 1988 taxes is December 31, 1990 to permit landowners adequate time to apply or demonstrate their eligibility.

Sharing of responsibilities among ministries

The Ministry of Natural Resources is the lead ministry and is responsible for The Conservation Land Act. The Act enables implementation of the Conservation Land Tax Reduction Program.

MNR, in conjunction with the Niagara Escarpment Commission, has identified eligible conservation land on maps which are being provided to the Ministry of Revenue.

The Ministry of Revenue is responsible for cataloging the qualifying conservation land on the municipal assessment database and for identifying the amount of assessment attributable to the conservation land.

The Ministry of Municipal Affairs will use that database to issue applications for property tax rebates to the owners of qualifying lands. MMA is also responsible for processing the applications and dispensing the rebates. This ministry has a similar role in the Managed Forest Tax Reduction Program.

What does keeping land in conservation use mean?

The objective of the Conservation Land Tax Reduction Program is to recognize the contribution which private landowners make through good stewardship to provincial conservation and natural heritage objectives.

Owners of specific types of conservation land are eligible for a rebate providing they agree to protect the conservation value of their property.

Landowners can continue to enjoy many recreational and economic benefits from their property, while still mantaining conservation values.

Wildlife viewing, hiking, hunting, fishing and trapping are activities which may be consistent with conservation use.

While permanent drainage of a wetland would be inconsistent with the protection of natural values, periodic drainage or diking might be consistent, and, in fact, might enhance certain wetland values.

.../7

Similarly, management of Areas of Natural and Scientific Interest or Escarpment Natural Areas, may include specific actions designed to enhance certain values.

Activities consistent with conservation use largely depend upon the nature of the values to be conserved. Destruction of those values will result in the property being considered no longer in a conservation use.

For discussion of uses on their specific properties, landowners should contact the local district office of the Ministry of Natural Resources.

Cost of the program

Estimated cost of the program is $5-million annually, in the form of provincial rebates. This takes into account research which indicates that more than 40 per cent of the lands identified may already receive agricultural or managed forest tax rebates, and, therefore, are not eligible for any additional rebates. It also recognizes that not all landowners will participate in the program.

Appealing decisions on eligibility or assessment

The Ministry of Natural Resources is the ministry responsible for determining the eligibility of lands for the program. This determination, as it relates to wetlands and ANSIs, is based upon a rigorous, systematic, scientific investigation conducted over time. In the case of the Niagara Escarpment, it is based upon the approved Niagara Escarpment Plan.

Landowners who believe their land has been incorrectly excluded from the program may appeal and should contact their local MNR district office to obtain information about the type of evidence landowners will need to compile to demonstrate why their land should be eligible.

MNR will examine the evidence presented by the landowners and make a decision, citing its reasons for doing so. If MNR decides the land cannot be included in the program, the landowners may appeal that decision within 30 days of receiving MNR's reasons for excluding the land.

The appeal must be made to the Mining & Lands Commissioner, who may dismiss the appeal, or may include the land in the program.

Landowners who disagree with the assessment made by the Ministry of Revenue on the property or the apportionment of taxes between conservation land and other lands which they own may appeal to the Assessment Review Board, under the Ministry of the Attorney General, within 21 days of the return of the 1988 assessment roll.

If the assessment is changed as a result of this appeal, the rebate paid on 1987 and 1988 taxes will be adjusted accordingly.

.../8

Can a landowner get management assistance?

The Ministry of Natural Resources can provide resource management advice.

Landowners may also be eligible for monetary assistance if the management actions they propose meet the criteria of the Community Fisheries Involvement or Community Wildlife Involvement programs.

The ministry also provides forest management advisory and assistance services and will assist landowners who manage their wooded areas to achieve both protection and production values.

For further information:

Local District Office
Ministry of Natural Resources

OR

Subsidies Branch
Ministry of Municipal Affairs
TORONTO (416) 585-7546

Appendix 5: Woodlands Improvement Act Agreement

Agreement made in duplicate this day of 19 , under The Woodlands Improvement Act.

BETWEEN:

THE MINISTER OF NATURAL RESOURCES
for the Province of Ontario, herein referred to as
"Minister",

— and —

Address: Phone No.

herein referred to as "Owner".

THIS AGREEMENT WITNESSES that in consideration of the mutual provisions contained herein the parties hereto agree as follows:

1. This agreement shall be in effect for the period of years, commencing with the day of , 19 .

2. The Owner hereby gives leave and licence unto the Minister, his servants, agents and contractors to enter onto the land, herein forest, described in Schedule "A", for the purpose of planting nursery stock or improving woodlands in accordance with the management program, herein management program, described in Schedule "B".

3. Provided that moneys are appropriated therefor by the Legislature, the Minister agrees to plant nursery stock or improve woodlands on the forest in accordance with the management program.

4. The Owner agrees to provide the nursery stock to be planted in accordance with the management program and it is understood that such nursery stock may be purchased from the Minister at the prices prescribed from time to time by the regulations under the Forestry Act.

5. (1) During the term of this agreement, the Owner agrees to protect the forest against livestock, fire, insects disease and other perils in accordance with the management program.

(2) The Owner agrees not to cut or remove any tree growing on the forest except as specified in the management program or for use by the Owner.

(3) This agreement shall not prevent the Owner from carrying out on the forest any operations that are consistent with this agreement.

6. (1) The Owner agrees to give written notice to the Minister of any proposed disposition of the forest or any part thereof.

(2) In the event of a disposition referred to in subparagraph 1, the Owner agrees that the Owner will not be relieved of the obligations of the Owner under this agreement until,

(a) the disposition has been completed, and

(b) the person, firm or corporation that has acquired the interest of the Owner in the forest or par thereof has entered into an agreement with the Minister assuming the obligations of the Owner under this agreement in respect thereto.

7. In the event that,

(a) the Owner does not comply with the provisions of this agreement, or

(b) the person, firm or corporation that has acquired the interest of the Owner in the forest or part thereof does not enter into the agreement referred to in paragraph 6(2) (b),

the Owner agrees that the Minister may on written notice to the Owner terminate this agreement and thereupon the Owner agrees to pay to the Minister the estimated management costs that are specified in the management program for the work that was performed under that program.

8. (1) Any notice required to be given by the Minister or Owner under this agreement may be personally delivered or mailed by pre-paid registered post to the last known address of the party to whom such notice is required to be given.

(2) Any notice mailed in accordance with subparagraph 1 shall be deemed to have been received on the fifth day next following and excluding the day it is deposited with any post office.

9. The Minister for the purposes of this agreement may act through the District Manager of the Administrative District, Ministry of Natural Resources, who can be contacted at the following address and telephone number:

10. It is hereby agreed that in construing this agreement the word "Owner" shall be read and construed as "Owner or Owners" as the number of the person or persons referred to in each case requires, and the number of the verb agreeing therewith shall be construed as agreeing with the said word so substituted.

IN WITNESS WHEREOF the parties hereto have executed this agreement.

SIGNED, SEALED and DELIVERED in the presence of

Witness — District Manager as authorized by the Minister of Natural Resou

Witness — Owner

Witness — Owner

Appendix 6: Fisheries Management Agreement

AGREEMENT made this day of 19 pursuant to The Game and Fish Act.

BETWEEN: THE MINISTER OF NATURAL RESOURCES
for the Province of Ontario,
hereinafter referred to as "MINISTER",

- and -

Address:

Phone Number:

hereinafter referred to as "Owner".

For and in consideration of the improvement and stabilization of rivers and streams and their banks on lands described as:

Stream/River Name	Lot #	Conc. #	Township	County

The owner of said land, having granted permission to the Minister to go upon the above described lands for the purpose of making and maintaining such stream and bank improvements as the Minister deems necessary furthering hereby agrees to grant the Minister easement to perform rehabilitation work along said stream where it flows through or along the property for the purposes of protecting banks from erosion and allowing growth of bank vegetation to hold soil in place in times of flooding, and by the same means to provide a shade for the protection of the fish in said stream. The Minister agrees to provide all seed or nursery stock, materials, labour and equipment necessary for constructing the developments agreed upon, and shall assume liability for any and all claims arising during the course of the rehabilitation work. It is further mutually understood and agreed that the Minister will erect and maintain fencing, and in consultation with the owner, provide adequate watering places for cattle and other livestock if the area affected is used for pasturing.

It is further understood that the owner will not willfully remove or destroy such improvements as are installed and agrees to provide reasonable care to protect all habitat developments.

No trees will be cut or other changes executed by the Minister on the above described lands without special permission of the owner.

...2

It is further mutually agreed that the owner allow/not allow persons legally entitled to do so, to catch and take fish from said stream by legal means and for this purpose to travel said lands as may be necessary for the full enjoyment of this privilege. It is further mutually understood that the owner retains the right to limit the number of fishermen to an amount which he determines to be reasonable, and to refuse permission to any individual, on any reasonable grounds, to travel or utilize the lands adjacent thereto.

The Minister may, from time to time, given adequate resources, furnish protection to said tract through patrol by Ministry personnel to protect fisheries resources, provide for public safety and protect rights and interests of the owner.

WITNESSES:

Land Owner's Signature

Ministry Official

MINISTRY OF NATURAL RESOURCES

DATE:

Ministry Program:

Appendix 7: Ducks Unlimited Landowner Agreement

CONSERVATION AGREEMENT

BETWEEN: ______________________________ of ______________________________.

(called throughout the "Grantor"), and

Ducks Unlimited Canada, a Corporation having its head office at 1190 Waverley Street, Winnipeg, Manitoba, (called throughout "DU").

AS the Grantor is the owner of the following land, in the Province of ______________, (called throughout "the land"), legally described as;

AND AS DU wishes to develop the land to maintain and improve it as a habitat for wildlife and waterfowl, (called throughout "the project");

AND AS the Grantor and DU agree that mutual benefits will result from the project, and in consideration of the sum of one dollar ($1.00) and other good and valuable consideration now paid by DU to the Grantor (receipt of which is acknowledged), the parties agree as follows:

The Grantor grants to DU:

(1) The right to enter into and on and a right of way along and over the land for the purposes of this agreement.
(2) The right to construct the project consisting of a dam and/or other works, and the right to bring onto and maintain on the land a quantity of water, as shown on a plan (#____________) prepared by ______________________________ and dated ________________, a copy of which is attached to this agreement as Schedule " ".
(3) The right to operate, manage and maintain the project as outlined in the attached management plan.
(4) The right to register this agreement with the Land Titles Office.

This agreement shall be for a term of 21 years from the date hereof and shall be automatically renewed from year to year thereafter, provided that any renewal may be terminated by either party giving one calendar years written notice.

This agreement shall run with the land.

Dated the ___ day of ______________, 198__.

______________________________ ______________________________
Witness Grantor

______________________________ ______________________________
Witness Grantor

DUCKS UNLIMITED CANADA

______________________ per ______________________, ______________
Witness Title

Project Name: ______________________ Project Number: ______________________ L/033/8310

Appendix 8: Bruce Trail Association Landowner Agreement

Part I

OCCUPIER'S PERMISSION FOR RECREATIONAL USE OF PREMISES

1. The occupier, Halton Hills Memorial Gardens, a division of Memorial Gardens (Ontario) Limited, of the premises that is Pt. Lot 15 concession I N.D.S. in the City of Burlington in the Region of Halton gives the supervising recreational Club(s) The Iroquois Bruce Trail Club and The Bruce Trail Association in return for the undertakings in Part III, the following limited permission for the entry and recreational use of the premises.

2. A person, whether or not a member of the supervising recreational club, is permitted by the occupier to enter and use the premises in a lawful manner in accordance with paragraphs 4 and 5 until the permission terminates under paragraph 6 or the permission is withdrawn from the person.

3. No fee is charged by the occupier for this permission.

4. Entry and recreational use is permitted only on those parts of the premises described as follows:

> The marked and signed route of the Bruce Trail as agreed upon in the field by representatives of the Iroquois Bruce Trail Club (or the Bruce Trail Association) and the Halton Hills Memorial Gardens.

5. Only the following recreational activities are permitted:

> pedestrian activities such as hiking, walking, jogging, snowshoeing, x-c skiing. No horses, and no mechanized vehicles of any kind are permitted.

6. Permission begins on August 23, 1986 and ends on the day the occupier gives notice of his intention to terminate the permission by removing signs permitting entry or by posting or marking the premises to prohibit entry (or by having the supervising recreational club do so on his behalf).

PART II OCCUPIER'S AUTHORIZATION OF AGENTS

7. The occupier authorizes the following persons to be his agents to enforce his rights with respect to the premises under The Trespass to Property Act, 1980 and the Criminal Code:

   Any Bruce Trail Association member who may be acting in an official capacity on behalf of the Bruce Trail Association or its affiliate, the Iroquois Bruce Trail Club.

8. The authority of each agent commences when the permission set out in Part I begins and, unless the occupier earlier revokes the authority, it continues until that permission terminates.

9. Each agent is authorized to prohibit entry to the premises by any person or to direct any person to leave the premises where in the opinion of the agent the presence or continued presence of the person on the premises would contravene the substance or spirit of this agreement.

10. Each agent is authorized to arrest a person who the agent believes on reasonable and probable grounds is in contravention of The Trespass to Property Act, 1980 and if the agent does arrest a person the agent shall immediately call for the assistance of a police officer and turn the arrested person over to the police.

11. Each agent is authorized to physically remove, using no more force than is necessary, a trespasser from the premises if the trespasser refuses to leave after being directed to do so.

12. Each agent is authorized to prosecute a person against whom the agent has laid a charge, and to request from the Court an award of damages on behalf of the occupier and the reasonable cost of prosecuting.

PART III UNDERTAKINGS BY CLUB MEMBERS

13. In exchange for the occupier's permission to enter and use the land for recreational purposes, the members of the supervisory clubs, which are The Iroquoia Bruce Trail Club and The Bruce Trail Association, promise to fulfill the following undertakings:

    14. The members agree to post the premises with signs and markings in accordance with The Trespass to Property Act, 1980 in order to carry out the occupier's intentions.

    15. The members agree to maintain the trail in reasonably good condition, to not create a danger with the deliberate intent of doing harm to a person or his property, and not to act with reckless disregard to the presence of a person or his property.

    16. The members, who are authorized as the occupier's agents, agree to supervise the Bruce Trail and enforce the provisions of The Trespass to Property Act, 1980.

    17. The members agree to remove any litter caused by the recreational entrants on the occupier's property on a regular basis, and within ten days of the expiry of the permission.

    18. The members agree to remove all signs posted in accordance with The Trespass to Property Act, 1980 on, or within ten days, of the termination of the permission.

19. The members, while on the occupier's premises, agree to abide by the Trail User's Code (copy attached).

Douglas J. Robertson

signature of the occupier(s)

Douglas J. Robertson
Executive Director
The Bruce Trail Association
P.O. Box 857, Hamilton, Ont.
(416) 529-6821

Appendix 9: OHF Natural Heritage Easement

DATED: day of October, 1983.

and -

THE ONTARIO HERITAGE
FOUNDATION

EASEMENT
AGREEMENT

Ministry of Citizenship and Culture,
Legal Branch,
77 Bloor Street West,
6th Floor,
Toronto, Ontario.
M7A 2R9

THIS EASEMENT AGREEMENT made the day

of October, 1983.

BETWEEN

hereinafter called the "Owner"

OF THE FIRST PART;

and -

THE ONTARIO HERITAGE FOUNDATION,
a body corporate continued by
The Ontario Heritage Act,
R.S.O. 1980, c.337,

hereinafter called the "Foundation"

OF THE SECOND PART;

WHEREAS the Owner is the registered owner of certain lands and premises situated in the , in the and Province of Ontario (hereinafter called the "Property"), and being composed of

as more particularly described in Schedule "A" attached hereto;

AND WHEREAS by section 7(c) of the Ontario Heritage Act, R.S.O. 1980, c.337, one of the objects of the Foundation is to support, encourage and facilitate the conservation, protection and preservation of the heritage of Ontario;

AND WHEREAS by section 10 (1) (b) of the Ontario Heritage Act, the Foundation is entitled to enter into agreements, covenants and easements with owners of real property, or interests therein, for the conservation, protection and preservation of the heritage of Ontario;

AND WHEREAS by section 22 of the Ontario Heritage Act, such covenants and easements entered into by the Foundation, when registered in the proper land registry office against the real property affected by them, shall run with the real property and may, whether positive or negative in nature, be enforced by the Foundation or its assignee against the owner or any subsequent owners of the real property, even where the Foundation owns no other land which would be accommodated or benefitted by such covenants and easements;

AND WHEREAS the Owner and the Foundation desire to conserve for posterity the present aesthetic, scenic and natural character and condition of the ecosystems of the Property, and to prevent its exploitation for commercial purposes;

AND WHEREAS to this end, the Owner and the Foundation desire to enter into this Easement Agreement (hereinafter called the "Agreement");

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the sum of TWO DOLLARS ($2.00) of lawful money of Canada now paid by the Foundation to the Owner (the receipt of which is hereby acknowledged), and for other valuable consideration, and in further consideration of the granting of the easements herein and in further consideration of the mutual covenants and restrictions hereinafter set forth, the Owner and the Foundation agree to abide by the following covenants, easements and restrictions which shall run with the Property forever.

VERSION A

1.0 Convenants Of Owner

1.1 The Owner shall not, except with the prior written approval of the Foundation, commit or permit any act or activity which might interfere with or detract from the aesthetic, scenic and natural character and condition of the

Property, and more particularly the Owner shall not,

(a) grant any lease, easement or right of way;

(b) sever or subdivide;

(c) erect or remove or permit the erection or removal of any building, sign, fence, or other structure of any type whatsoever;

(d) except for the maintenance of existing foot trails, fire lanes or other accesses, construct, improve or allow the construction or improvement of any road, parking lot, dock, aircraft landing strip or other such facility;

(e) allow the operation of snowmobiles, dunebuggies, motorcycles, all-terrain vehicles, motorboats, or any other types of motorized vehicles on the Property;

(f) allow the Property to be used as a camping ground, trailer or mobile home park;

(g) allow the dumping of soil, rubbish, ashes, garbage, waste or other unsightly, hazardous, non-compostable or offensive materials of any type or description;

(h) allow the use of pesticides, insecticides, herbicides, chemicals or other toxic materials of any type or description;

(i) allow any changes in the general appearance or topography of the lands, including and without limiting the generality of the foregoing, tilling and grazing of livestock and the construction of drainage ditches, retaining walls, dams, transmission towers and lines, pipelines and other similar undertakings;

(j) allow the dumping, filling, excavation, mining, drilling, dredging or removal of topsoil, loam, gravel, sand, rock, minerals, gas or petroleum products or other materials of any type or description;

(k) allow the removal, destruction or cutting of trees, shrubs or other vegetation except as may be necessary for (i) the maintenance of existing foot trails, fire lanes or other accesses, or (ii) the prevention or treatment of disease;

(l) allow any activities, actions or uses detrimental or adverse to water conservation, erosion control and soil conservation and the preservation of native plant and animal species;

(m) allow the planting or other introduction of non-native plant or animal species;

(j) allow any of the foregoing activities, or any other actions or uses that may have a detrimental impact on the surrounding land.

1.2 The request for approval referred to in paragraph 1.1 shall be delivered to the Foundation in accordance with the provisions of paragraph 9.1. Approval by the Foundation shall be deemed to have been given by the failure of the Foundation to reply in writing within sixty (60) days of the receipt of such request.

1.3 Notwithstanding any provision of paragraph 1.1, the Owner shall not be in breach of said paragraph if he does or causes to be done any act or thing in instances of actual or apprehended emergency.

1.4 The Owner shall not be in breach of paragraph 1.1 if any act or thing contrary to the provisions of the said paragraph occurs which is beyond the reasonable control of the Owner, including without limitation damage by fire, flood, earthquake, and damage occasioned by trespassers or others on the Property without the express consent of the Owner. Not withstanding the aforesaid the Owner shall, wherever appropriate or possible, act as a prudent owner would normally do to halt or remedy any act or thing done or damage occasioned by trespassers or others acting without the consent of the Owner. Except for the removal of debris, the Owner shall not be responsible to repair or rebuild the real property or any improvement erected thereon from time to time if damage is occasioned thereto as contemplated in this paragraph 1.4.

1.5 The Owner shall immediately advise the Foundation of any substantial damage or destruction to the Property and/or any act or thing done or caused to be done by the Owner pursuant to paragraph 1.3.

2.0 Reserved Rights

2.1 The Owner expressly reserves for himself, his heirs, executors, administrators, representatives, successors and assignees the right to continue to use the Property for all purposes not inconsistent with this Agreement.

VERSION B

1. Convenants of Owner

1.1 The Property shall be used for single family residential and conservation purposes only. No commercial, industrial, or mining activities shall be permitted on the Property, with the exception of fishing, farming, aquaculture and the renting of the structures allowed hereunder. No apartment buildings, multi-family units, motels or hotels shall be constructed on the Property.

1.2 At present there are structures located on the Property, namely:

(a)

(b)

(c)

(d)

No additional structures of any kind, temporary or permanent, shall be located on the Property, provided however, there is retained in the Owner, his heirs and assigns, the following rights:

(a) the right to build single family residential buildings and other non-residential structures accessory to the residences which do not materially alter the natural and scenic appearance of the landscape when viewed from offshore. No buildings or structures shall be located within the area between low and high water marks of the Property or between high water mark and a line parallel to, and set back feet from said water mark;

(b) the right to replace, rebuild, or alter, any or all of the existing structures or additional structures allowed hereunder; however, any such replacement, rebuilding, or alteration shall be such as not materially to alter the natural and scenic appearance of the landscape when viewed from offshore;

(c) the right to perform ordinary maintenance on the structures allowed hereunder.

1.3 No alteration shall be made to the Property other than that caused by the forces of nature, unless such alteration is approved in advance and in writing by the Foundation, provided however, that there is retained in the Owner, his heirs and assigns, the following rights:

(a) The right to cultivate land for farming or personal gardens;

(b) the right to excavate in connection with the maintenance, improvement, replacement, rebuilding, alteration or construction either of the structures authorized hereunder or of the water, sewerage, and other services related to the residential use of the Property;

(c) the right to maintain or rebuild existing roadways;

(d) the right to construct and maintain foot trails;

(e) the right to maintain and operate one pit for each dwelling for the disposal of personal trash, garbage, and other discarded materials.

1.4 Without limiting the generality of the foregoing, billboards, trailers, mobile homes, bridges or causeways, or utilization of the Property as an aircraft landing site, are specifically prohibited on the Property, provided however, there is retained in the Onwer, his heirs and assigns, the following rights:

(a) the right to post the Property to control unauthorized use;

(b) the right to erect temporary signs to advertise the Property for sale or for rent;

1.5 The cutting of standing timber shall not be permitted, provided however, there is retained in the Owner, his heirs and assigns, the following rights:

(a) the right to clear and restore forest cover that is damaged or disturbed by the forces of nature;

(b) the right to gather, use or remove dead wood;

(c) the right to prune or selectively thin trees to provide firewood for personal use to provide or maintain views from dwellings;

(d) the right to maintain existing open fields.

1.6 Any modification, alteration, construction, or reconstruction of any waste disposal system shall be done in a manner that will prevent discharge of any waste into salt or fresh waters located on or about the Property that will adversely affect the purity of such waters.

2.0 The Owner shall immediately advise the Foundation of any substantial damage or destruction to the Property and/or any act or thing caused to be done by the Owner pursuant to paragraphs 1.2 (a), 1.2 (b) and 1.5 (a).

3.0 Inspection Of The Property

3.1 The Foundation or its representatives shall be permitted at all reasonable times to enter upon and inspect the Property upon prior written notice to the Owner of at least twenty-four (24) hours.

4.0 Notice Of Easement

4.1 The Foundation shall be permitted to erect a plaque on the Property, in a tasteful manner and at the Foundation's expense, indicating that the Foundation holds a conservation easement on the Property.

4.2 The Owner agrees to allow the Foundation to publicize the existence of the easement.

5.0 Remedies of Foundation

5.1 If the Foundation is of the opinion that the Owner has neglected or refused to perform any of his obligations set out in this Agreement, the Foundation may, in addition to any of its legal or equitable remedies, serve on the Owner a notice setting out particulars of the breach and of the Foundation's estimated maximum costs of remedying the breach. The Owner shall have thirty (30) days from receipt of such notice to remedy the breach or make arrangements satisfactory to the Foundation for remedying the breach. If within those thirty (30) days the Owner has not remedied the breach, or if the Owner does not carry out the said arrangements within a reasonable period of time, the Foundation may enter upon the Property and may carry out the Owner's obligations and the Owner shall reimburse the Foundation for any expenses incurred thereby, up to the estimated maximum costs of remedying the breach set out in the aforesaid notice. Such expenses incurred by the Foundation shall, until paid to it by the Owner, be a debt owed by the Owner to the Foundation and recoverable by the Foundation in a court of law.

5.2 The failure of the Foundation at any time to require performance by the Owner of any obligations under this Agreement shall in no way affect its right thereafter to enforce such obligation, nor shall the waiver by the Foundation of the performance of any obligation hereunder be taken or be held to be a waiver of the performance of the same or any other obligation hereunder at any later time.

6.0 Extension Of Time

6.1 Time shall be of the essence of this Agreement. Any time limits specified in this Agreement may be extended with the consent in writing of both the Owner and the Foundation, but no such extension of time shall operate or be deemed to operate as an extension of any other time limit, and time shall be deemed to remain of the essence of this Agreement notwithstanding any extension of any time limit.

7.0 Severability Of Covenants

7.1 The Owner and the Foundation agree that all covenants, easements and restrictions contained in this Agreement shall be severable, and that should any covenant, easement or restriction in this Agreement be declared invalid or unenforceable, the remaining covenants, easements and restrictions shall not terminate thereby.

8.0 Dissolution Of Foundation

8.1 In the event of the winding up or dissolution of the Foundation, all of the Foundation's interests herein shall be automatically assigned and transferred to Her Majesty the Queen in Right of Ontario or to any other entity specified by statute.

9.0 Notice

9.1 Any requests for approval required under this Agreement and the Foundation's replies to such requests shall be delivered in person or by prepaid ordinary mail to the parties at their respective addresses. The respective addresses of the parties for such purposes presently are as follows:

THE OWNER

THE FOUNDATION

The Ontario Heritage Foundation,
Parliament Buildings,
Queen's Park,
Toronto, Ontario.
M7A 2R9

The parties agree to notify each other immediately, in writing, of any changes of address from those set out above.

9.2 Except in the event of an interruption in the postal service, any notices to be given under this Agreement shall be delivered in person or sent by pre-paid registered mail addressed to the parties at their respective addresses as set out in paragraph 9.1. In the event that a notice is delivered in person, the party receiving the notice shall forthwith indicate receipt of the notice by signing a form of acknowledgement of receipt, and in that event, the notice shall be deemed to have been received on the date on which the form of acknowledgement of receipt was signed. In the event that a party refuses to sign an acknowledgement of receipt of the notice, the person delivering the notice may swear an affidavit of service, and the notice shall be presumed to have been received on the date of service as set out in such affidavit. In the event that a notice is sent by pre-paid registered mail, it shall be deemed to have been received on the second clear day following the day on which the notice was sent.

9.3 In the event of any interruption in the postal service, notice may be given to either party at its respective address as set out in paragraph 9.1, either in person or by special courier. The party receiving the notice shall indicate the receipt of it by signing a form of acknowledgement of receipt, and the notice shall be deemed to have been received on the date on which the form of acknowledgement of receipt was signed. In the event that either party refuses to sign an acknowledgement of receipt of the notice, the person delivering the notice may swear an affidavit of service, and the notice shall be presumed to have been received on the date of service as set out in such affidavit.

10.0 Costs

10.1 In the event that a dispute arises between any of the parties hereto because of this Agreement, each party shall be responsible for its own legal fees, court costs and all other similar type expenses which may result from any such dispute.

11.0 Entirety

11.1 This written Agreement embodies the entire agreement of the parties with regard to the matters dealt with herein, and no understandings or agreements, verbal, collateral or otherwise, exist between the parties except as herein expressly set out.

12.0 Transfer of Property

12.1 Notice of these covenants, easements and restrictions shall be inserted by the Owner in any subsequent deed, lease or other legal instrument by which he transfers either the fee simple title to or his possessory interest in the Property.

12.2 The Owner shall immediately notify the Foundation in the event that he divests himself of the fee simple title to or of his possessory interest in the Property.

13.0 Headings

13.1 The headings in the body of this Agreement form no part of the Agreement but shall be deemed to be inserted for convenience of reference only.

14.0 Enurement

14.1 The covenants, easements and restrictions set out in this Agreement shall run with the Property and shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals.

SIGNED, SEALED AND DELIVERED in the presence of:	
______________________________	______________________________
	THE ONTARIO HERITAGE FOUNDATION
	Per:
	______________________________ Chairman
	c/s
	______________________________ Secretary

PROVINCE OF ONTARIO) IN THE MATTER OF
) the Ontario Heritage
) Act, R.S.O. 1980,
) c. 337
)
)

CONSENT

Pursuant to section 10 (1) (b) of the Ontario Heritage Act, R.S.O. 1980, c. 337, and delegated authority pursuant to section 7 (1) of the Ministry of Citizenship and Culture Act, R.S.O. 1982, c. 6, I, the undersigned Deputy Minister of Citizenship and Culture for the Province of Ontario, do hereby consent to the execution by The Ontario Heritage Foundation of the attached Easement Agreement between , of the first part, and THE ONTARIO HERITAGE FOUNDATION, of the second part, dated the day of ,1983, and do hereby certify that the said Easement Agreement is in accordance with policies and priorities for the conservation, protection and preservation of the heritage of Ontario.

DATED at Toronto the day of , 1983.

Deputy Minister of Citizenship
and Culture for the Province
of Ontario.

Appendix 10: Funding for State Conservation Programs

STATES STAKE LAND PROTECTION

Year by Year, Funds Increase

The President's Advisory Committee on Americans Outdoors called for "lighting a prairie fire" of conservation activism. Interestingly, while Congress and the Administration have fumbled for their matches, smoke signals keep drifting up from statehouses around the nation.

They may not portend a prairie fire, but they indicate, at the least, that some serious prescribed burning is underway.

The smoke signals arise from state and local initiatives funding acquisition of natural areas, open space, greenways, and parks. Example: On Jan. 2 Governor Mario Cuomo called for $1.9 billion in bonds to finance environmental protection in New York. More than a dozen other states have approved similar issues ranging from California's giant $776 million package to New Mexico's referendum on $400,000—a fair sum in the land of enchantment. Even Nevada, home of the Sagebrush Rebellion, will vote on bonds of $48 million in 1990.

Nine states, believing that development activity should help pay for preservation, gin up conservation dollars by taxing real estate transfers. Florida pioneered that idea in 1982.

Other states have set up conservation trust funds. (Minnesota's could grow to a corpus of $1 billion.) Still others depend on direct appropriations, "sin" taxes, lottery proceeds, or—believe it or not—vanity license plate sales. All but about a dozen are doing something significant, as shown in the box below.

Carol Baudler, who tracks these developments for The Nature Conservancy, says, "The states are the real leaders in saving land—it's a groundswell of support."

"The states are the real leaders — it's a groundswell of support."

■ **ARIZONA**'s park entrance fees generate $1 million/year; a trust fund is in the works for 1990. ■ **ARKANSAS**'s 1986 transfer tax yields $4 million/year for natural areas & historic sites. ■ **CALIFORNIA** passed $776 million in bonds in 1988; also makes appropriations. ■ **CONNECTICUT** has passed $27 million in conservation bonds since 1986. ■ **FLORIDA** passed $300 million in bonds, 1986-87; also has transfer tax generating $20-40 million/year for conservation. ■ **GEORGIA**, testing waters, passed bonds of $15 million in 1989; a portion will go for wildlife. ■ **HAWAII**'s 1987 natural area reserve fund has a goal of $25 million. ■ **ILLINOIS**'s new transfer tax should yield $10 million/year for natural areas. ■ **INDIANA**, in 1983, appropriated $10 million to be matched 1:1 with private funds. ■ **IOWA** combines lottery proceeds with a standing appropriation, totalling $30 million for conservation per year. ■ **LOUISIANA** voters, in November, gave landslide approval to wetland funding of $5-$40 million/year. ■ **MAINE** passed a conservation bond package of $35 million in 1987. ■ **MARYLAND** spends $36 million/year from its transfer tax on Project Open Space. ■ **MASSACHUSETTS** approved a bond package of $250 million in 1987. ■ **MICHIGAN** established a $150 million conservation trust fund in 1977. ■ **MINNESOTA**'s Natural Resources Trust (1988) could reach $1 billion corpus. ■ **MISSOURI**'s sales tax provides $43 million/year for its Dept. of Natural Resources. ■ **NEBRASKA**'s cigarette tax yields $1 million/year for parks. ■ **NEVADA** will vote on $48 million in conservation bonds in 1990. ■ **NEW HAMPSHIRE** appropriated $20 million for open space and natural areas in 1987. ■ **NEW JERSEY** voters approved $300 million in open space bonds last November. ■ **NEW MEXICO**, in 1988, made $900,000 available for rare species habitat. ■ **NEW YORK** passed $250 million in land acquisition bonds in 1986, while Suffolk Co. passed $65 million; East Hampton approved $5 million in '89. ■ **NORTH CAROLINA** funds its Heritage Trust with vanity license plate sales yielding $1.5 million/year. ■ **OREGON** passed a trust fund bill in 1989; efforts are now underway to fund it. ■ **PENNSYLVANIA** is led by Chester Co., which passed $50 million in local bonds in '89. ■ **RHODE ISLAND** has approved $147.5 million in bonds since 1986; plus, Block Island's transfer tax generates up to $500,000/year locally. ■ **SOUTH CAROLINA** gets $2 million/year for conservation from its 1986 transfer tax. ■ **TENNESSEE**'s transfer tax yields $2.5-$3 million/year for wetlands. ■ **TEXAS** levies a penny tax on each pack of cigarettes for parks and open space. ■ **VERMONT** splits $3 million/year from its transfer tax between housing and conservation. ■ **VIRGINIA** appropriated $1.5 million in 1988; may double that in 1990. ■ **WASHINGTON** earmarked $12 million from transfer tax, 1988-89. ■ **WISCONSIN** passed a $250 million (over 10 years) bond package in July 1989.

Source:

Common Ground
Vol. 1, No. 2,
January 1990